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STATISTICS OF WISCONSIN PUBLIC UTILITIES

1987-1986-1985

ELECTRIC, GAS, TELEPHONE
WATER AND HEATING UTILITIES

PUBLIC SERVICE COMMISSION OF WISCONSIN
Accounts and Finance Division

Bulletin No. 8

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STATISTICS OF WISCONSIN PUBLIC UTILITIES

1987-1986-1985

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STATISTICS OF WISCONSIN PUBLIC UTILITIES

This bulletin presents a statistical summary of public utilities operating in Wisconsin during the period 1987-1985 inclusive. In addition, selected data over longer periods are shown in the text or portrayed in the charts. Some Wisconsin utilities have operations outside the State. These operations are generally excluded from the summaries but this was not possible in the case of financial data shown in Tables 1, 2, and 3.

The following table gives an indication of the relative importance of various utility services included in the report.

	Year Ending December 31, 1987		
	Average Number of Customers*#	Operating Revenues*	Net Operating Revenues*
Electric	1,970,340	$2,571,961,193	$439,340,031
Gas	1,153,356	1,114,693,957	57,548,642
Telephone	2,346,694	1,372,339,358	263,096,658
Water	990,732	194,637,270	34,659,397
Heating	571	10,565,921	817,078
		$5,264,197,699	$795,461,806

* Excludes out-of-state operations.
# Ultimate consumers.

Chart 1 presents a comparison of trends in gross operating revenue since 1978. Gas utility revenues increased by 39% in 9 years. Electric and telephone revenues increased 88% and 72% respectively while water revenues rose 93% during the 9-year period.

Chart 2 shows that since 1978, net operating telephone revenues have risen 71%, electric revenues 101% , water revenues 167% and gas revenues 15%.

CHART 1

COMPARATIVE TRENDS OF OPERATING REVENUES

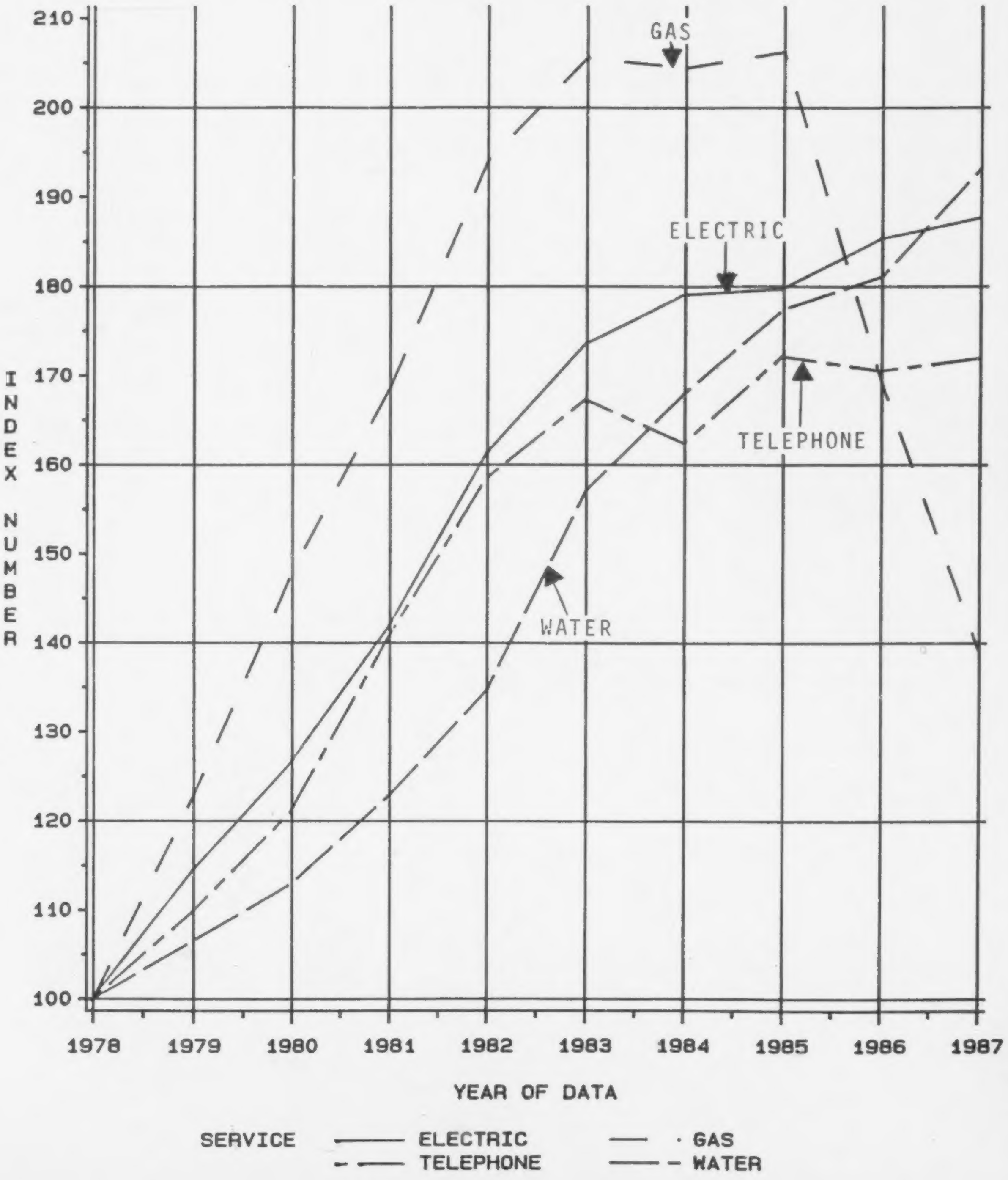
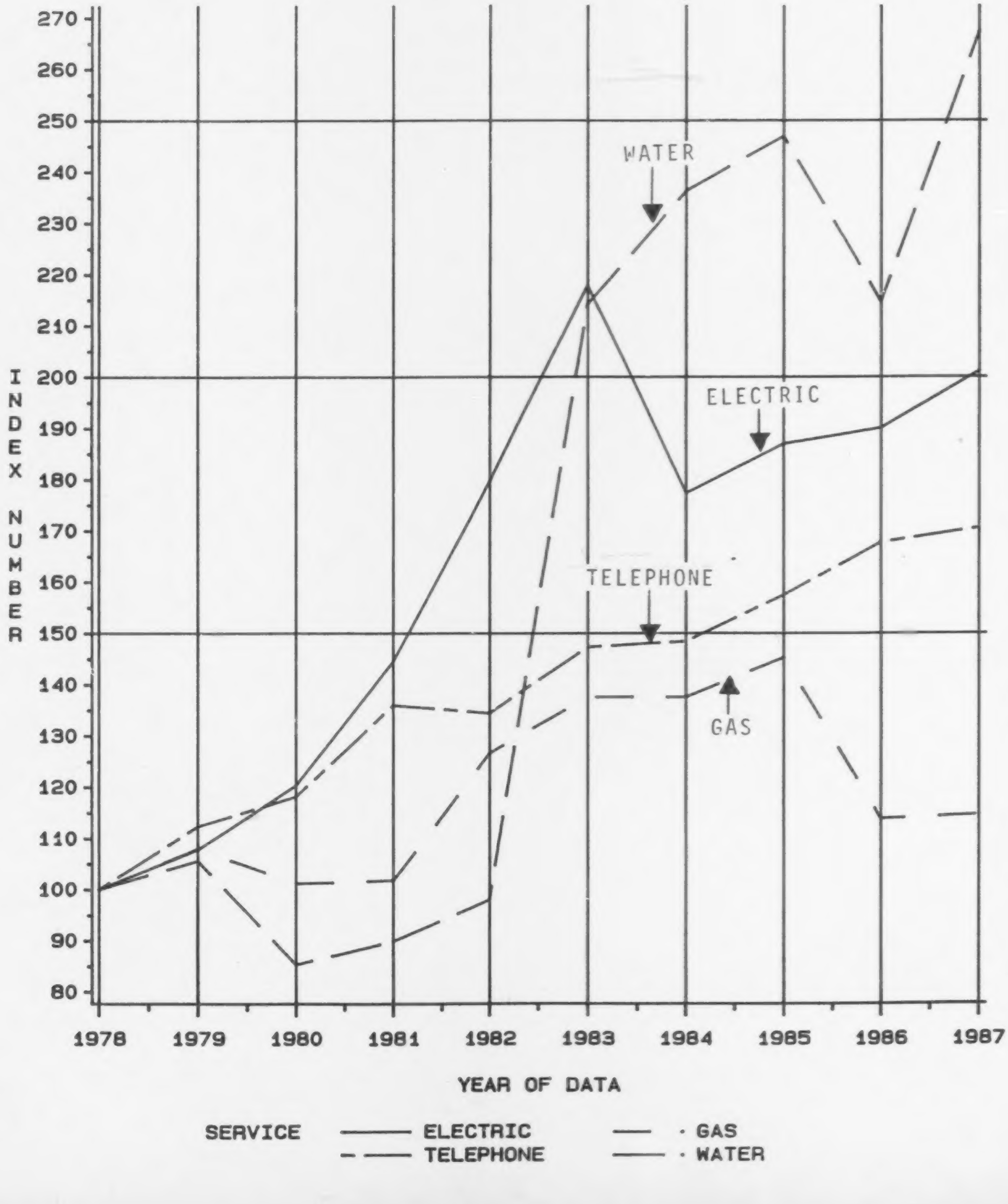


CHART 2

COMPARATIVE TRENDS OF NET OPERATING REVENUES



The number of public utilities operating in the State as of December 31, 1986 is summarized below. These figures include all utilities regardless of size.

	Total	Private	Municipal
Electric	94	12	82
Gas	15	14	1
Telephone	99*	99*	0
Water	551	9	542
Heating	2	1	1
Total	761	135	626

* There are 27 resellers authorized to be alternative telecommunications and five telephone companies offering resale of MTS and WATS within their telephone franchise areas. Two cellular mobile companies which are operating as alternative telecommunications utilities per 05-TI-106. Eight are deregulated per s.196.202(2). Three are pending application for ATU status and four cable telecommunications.

FINANCIAL STATISTICS

Statistics on plant investment, capitalization and disposition of income are presented in this section of the bulletin. These data necessarily include all operations of Wisconsin utilities, including out-of-state operations of those utilities operating in neighboring states.

A number of municipalities include nonutility sewer operations in their water utility reports. Figures on income and capitalization reflect these operations when reported. It is to be emphasized, however, that sewer coverage presented herein is by no means complete since many municipalities operate their non-utility sewer departments independently and do not report those operations.

Utility Plant in Service and Accumulated Provisions for Depreciation:

Table 1 presents a summary of utility plant in service and accumulated provisions for depreciation of Wisconsin utilities during the period from 1985 through 1987. Charts 3, 4 and 5 show similar data in graphic form over the past 9 years.

About $13.6 billion are invested in utility plant by Wisconsin utilities. Of this amount, electric plant makes up 51.0% with telephone, water and gas plant amounting to 27.7%, 10.2% and 9.6% respectively. Sewer and heating plant make up another 1.5%.

Electric cooperatives and companies engaged in intrastate transmission of natural gas do not fall under the jurisdiction of the Wisconsin Public Service Commission and therefore, data covering these companies are not included in this study. Electric cooperatives did have gross plant investment in Wisconsin of about $738 million as of December 31, 1987. Gas pipeline companies had about $261.4 million in gross plant as of the same date.

Except for water and sewer service, public utility operations in Wisconsin are predominantly under private management. For example, municipalities own and operate 98% of the total water plant but only 4% of the electric plant, about 0.05% of the gas distribution plant and no telephone plant.

As of December 31, 1987, Wisconsin electric utilities had accumulated provisions for depreciation equal to 46% of electric plant in service. Telephone utilities had accumulated 35%, water utilities 21% and gas utilities 47%. The comparable figures in 1978 were 38%, 22%, 20% and 33% respectively.

Charts 3, 4, 5 and 6 show that utility plant in service has increased steadily over the past 9 years. Electric utility plant has increased 94% since 1978. Telephone plant is up 52% while water and gas plant increased 68% and 57% for the period.

Capitalization:

Capitalization of public utilities in Wisconsin is summarized in Table 2 and Charts 7 and 8. Total capitalization was about $8,271 million in 1987. Of that amount 78% was accounted for by private utilities with the remaining 22% being municipal investment.

Total capitalization was down 0.6% over 1986, and up 41% over the past 10 years. Corresponding figures are 2.7% and 33% for private utilities and 7.3 and 78% for municipals. Charts 7 and 8 give graphic representation of these figures.

CHART 3

UTILITY PLANT IN SERVICE
AND ACCUMULATED PROVISION FOR DEPRECIATION
ELECTRIC UTILITIES

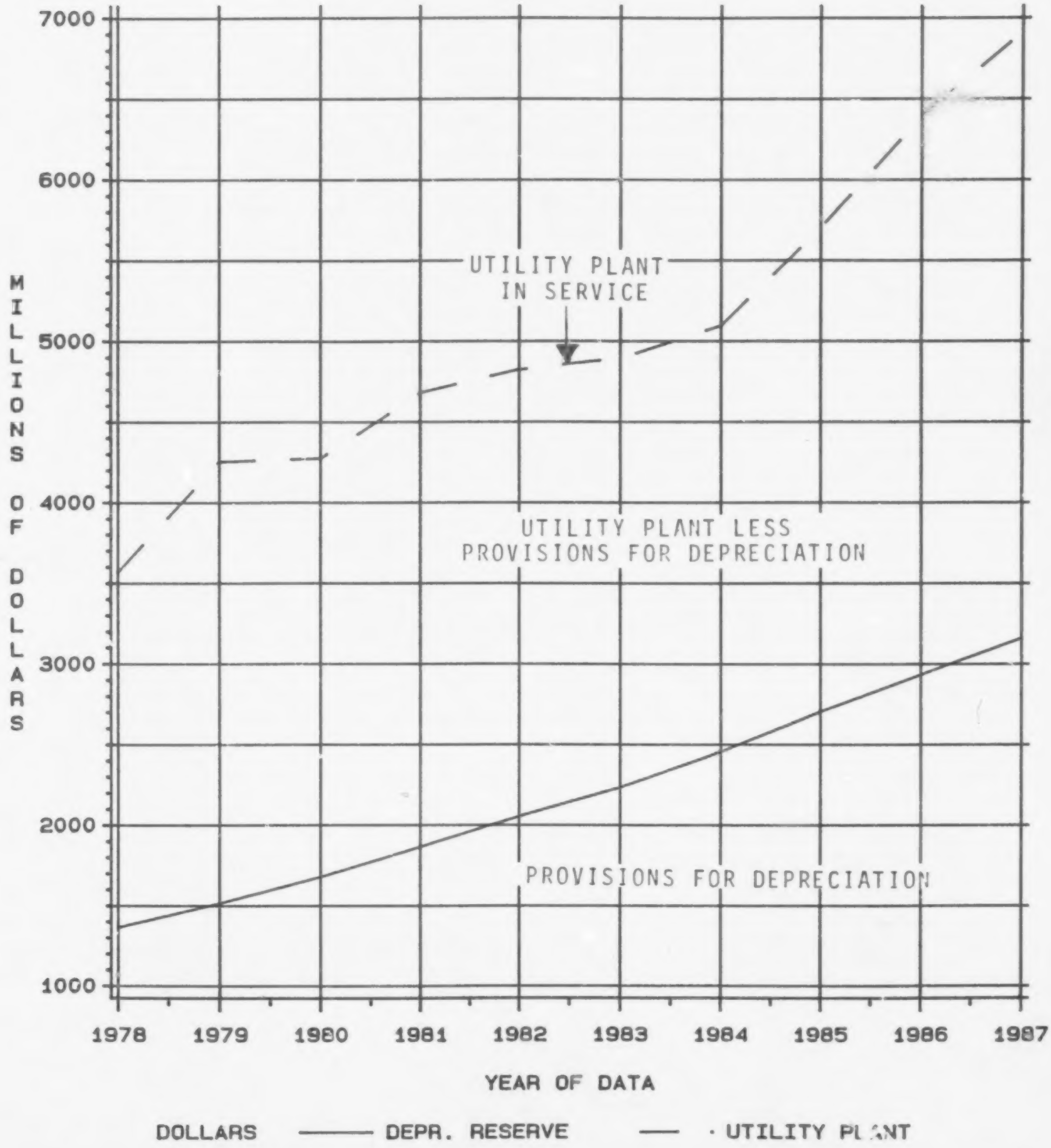


CHART 4

UTILITY PLANT IN SERVICE AND ACCUMULATED PROVISION FOR DEPRECIATION TELEPHONE UTILITIES

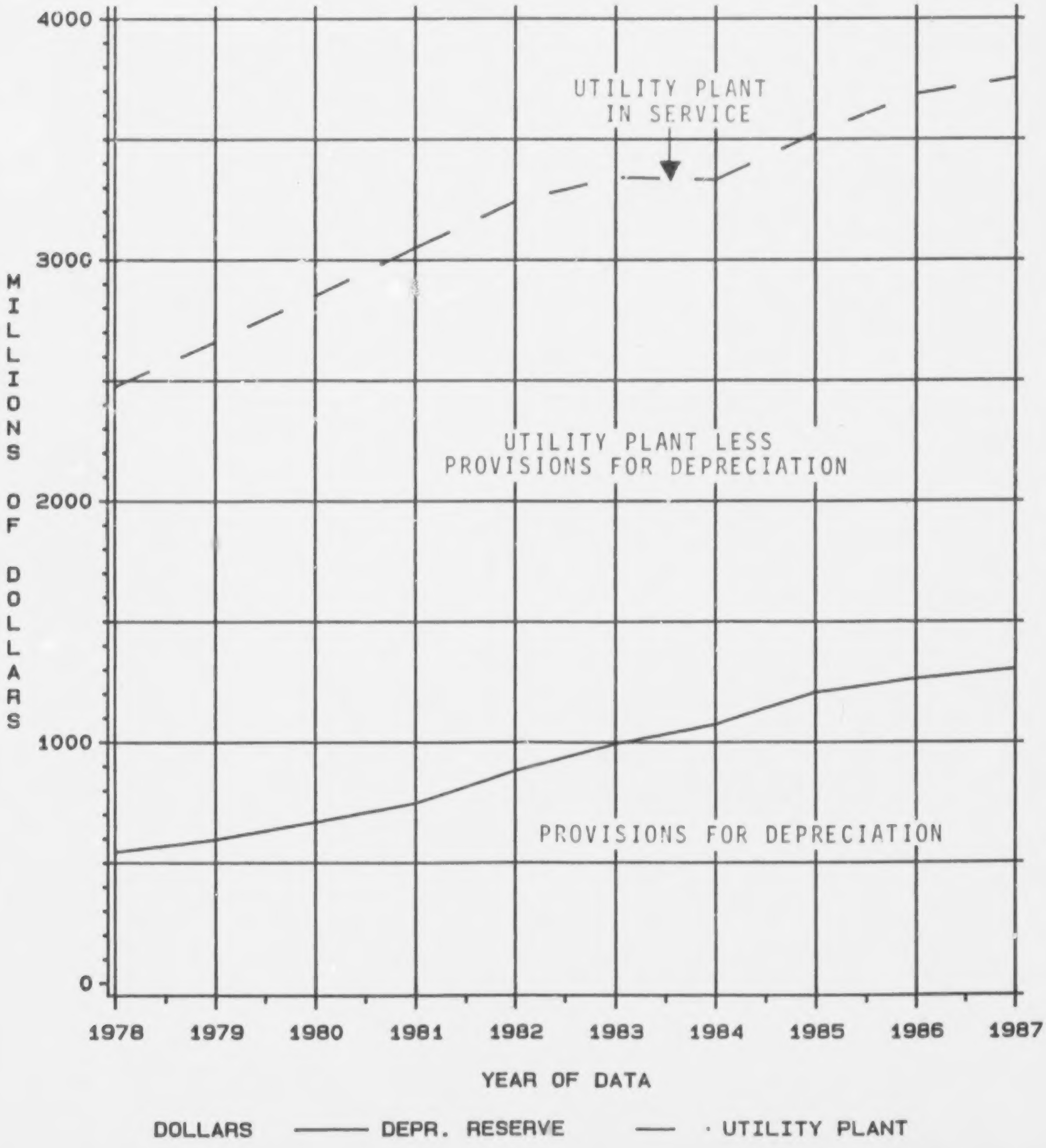


CHART 5

UTILITY PLANT IN SERVICE AND ACCUMULATED PROVISION FOR DEPRECIATION WATER UTILITIES

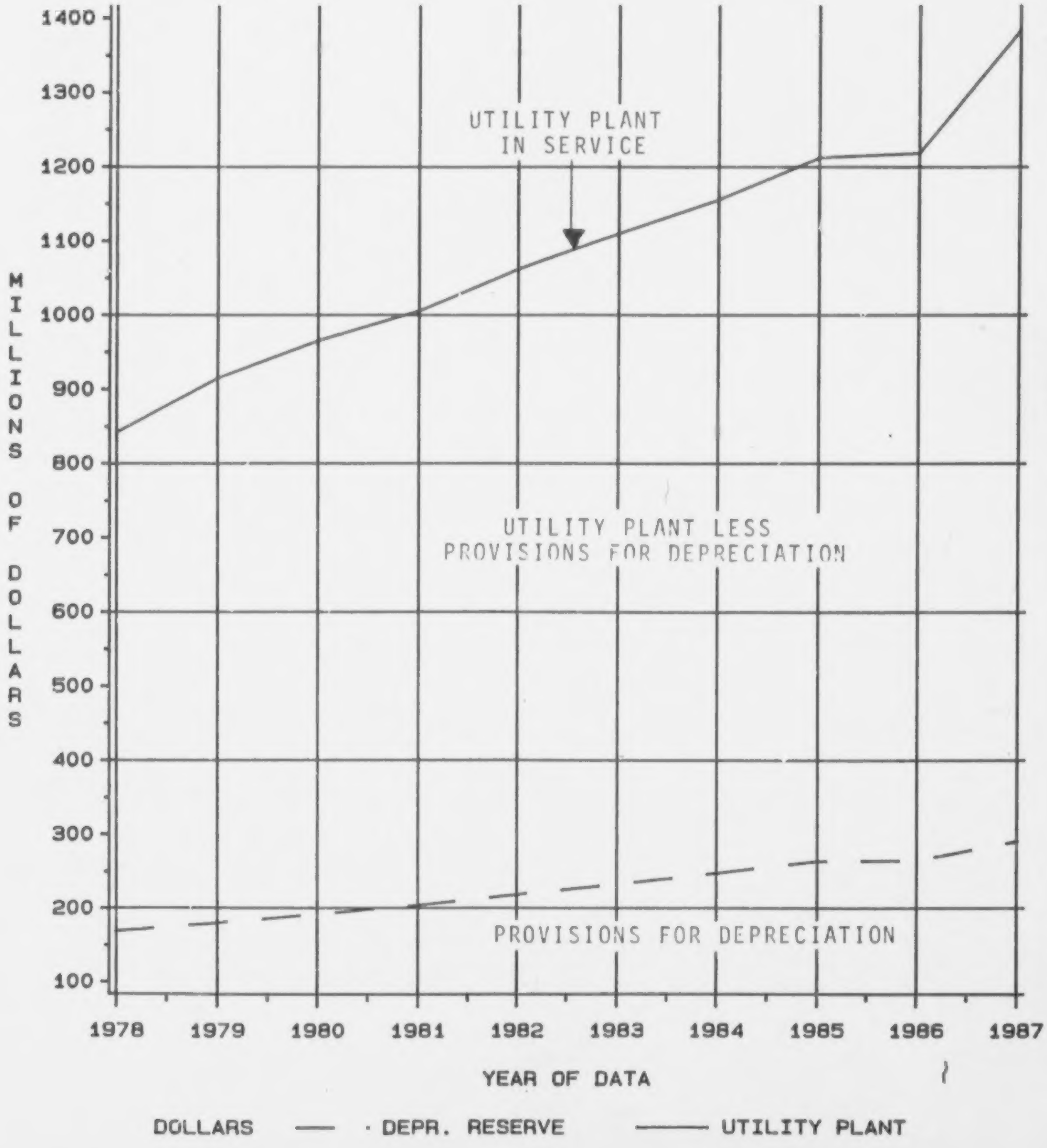


CHART 6

UTILITY PLANT IN SERVICE
AND ACCUMULATED PROVISION FOR DEPRECIATION
GAS UTILITIES

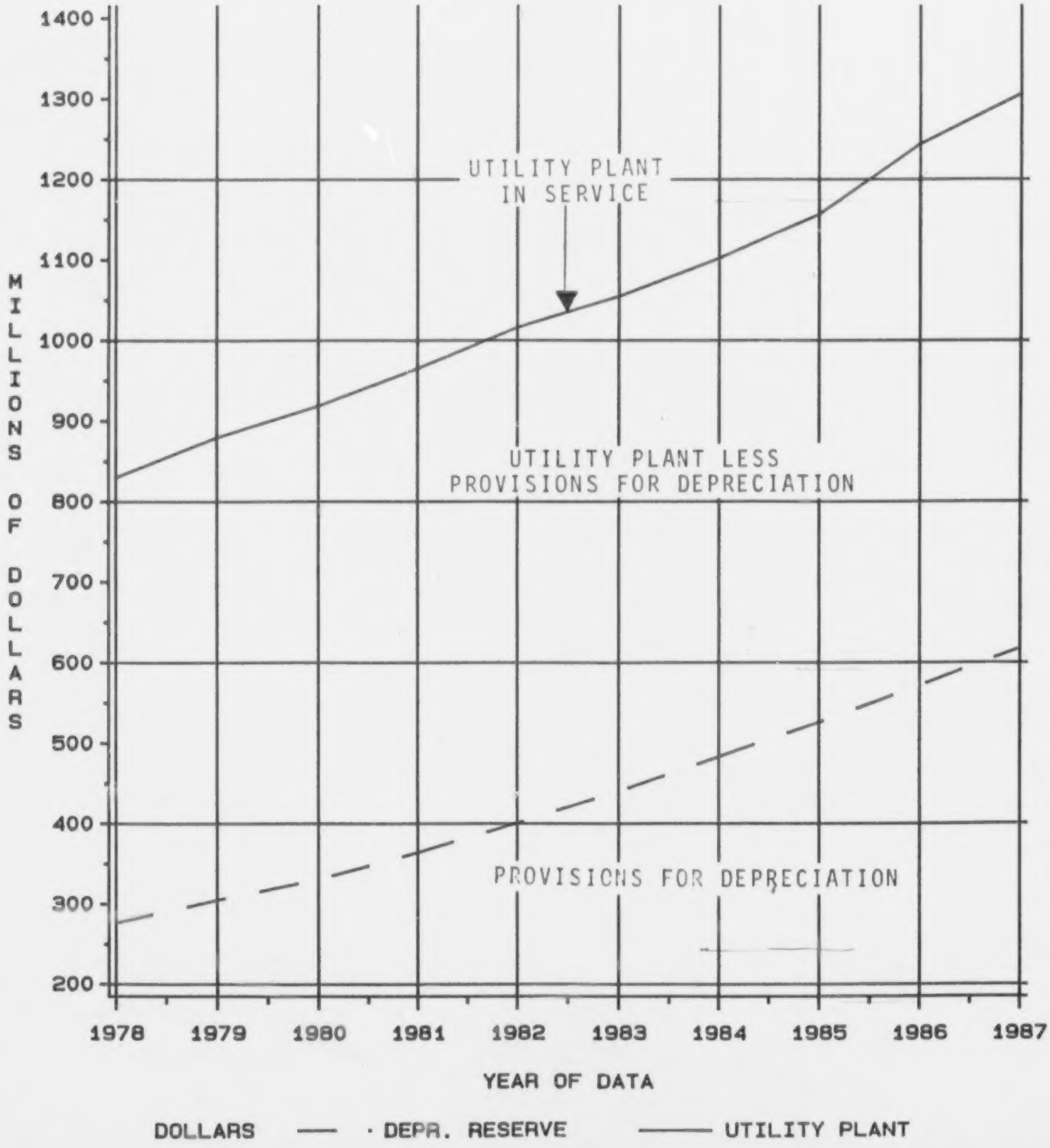


CHART 7
CAPITALIZATION OF PRIVATE UTILITIES OPERATING IN WISCONSIN

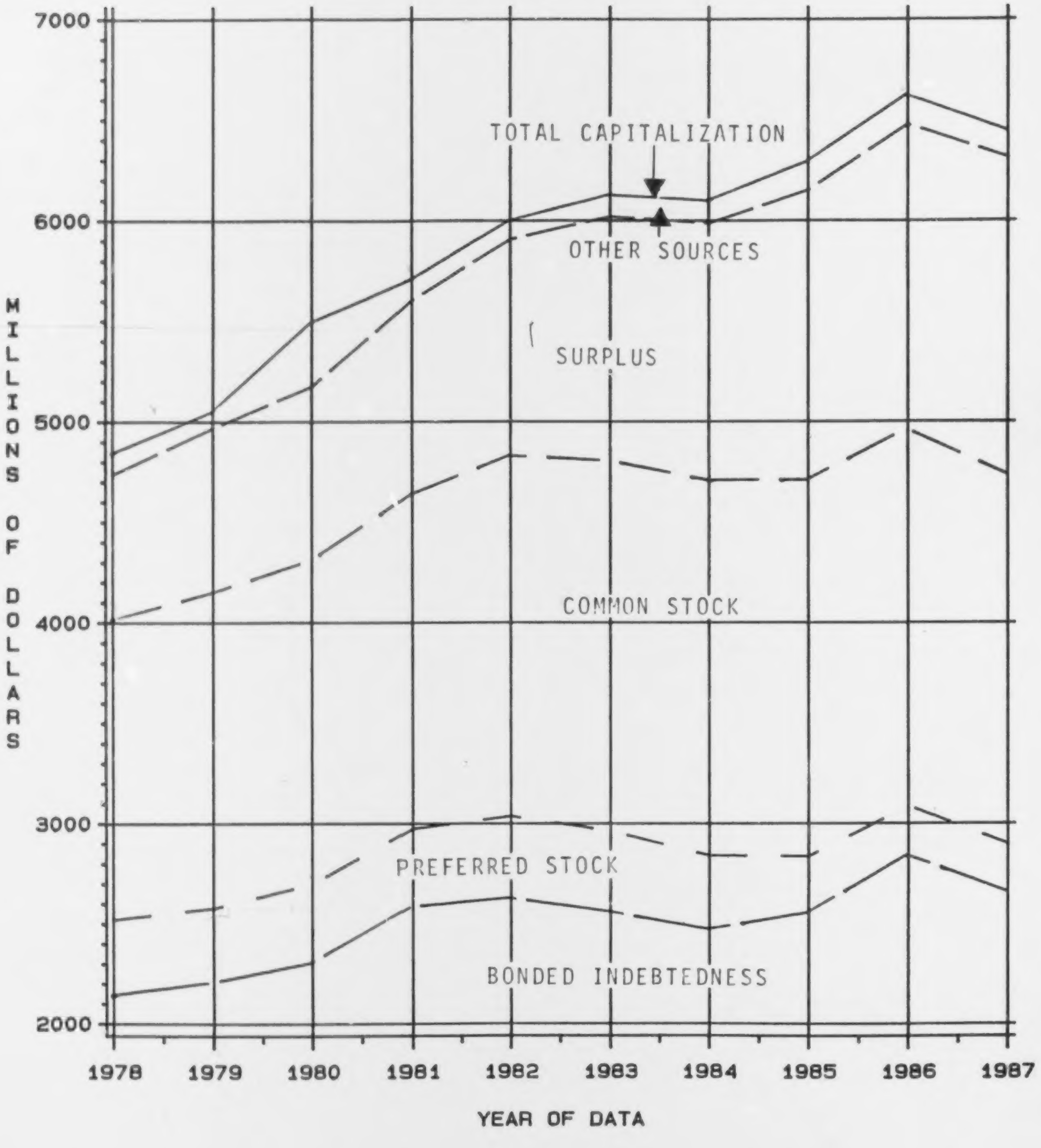


CHART 8

CAPITALIZATION OF MUNICIPAL UTILITIES OPERATING IN WISCONSIN

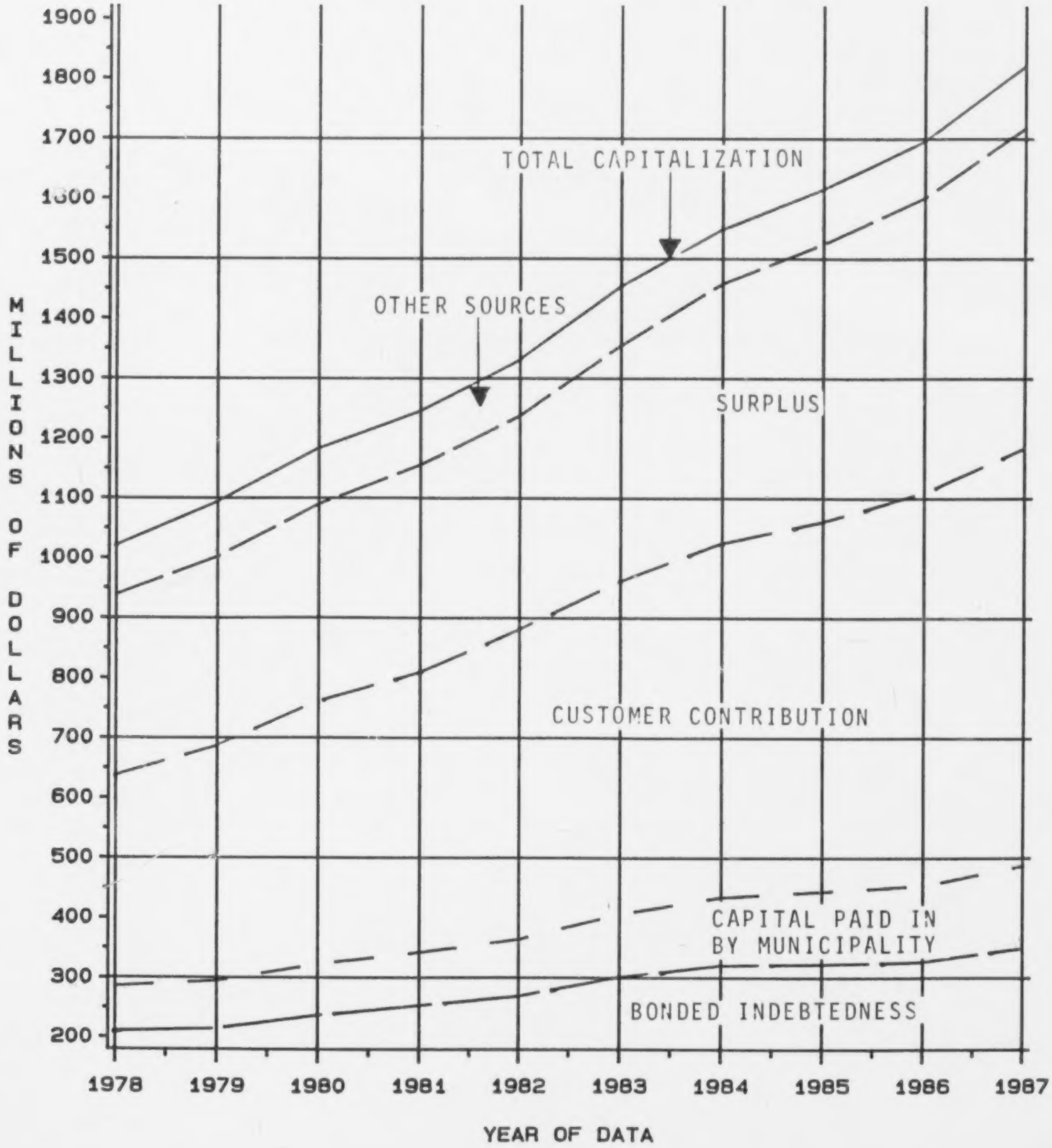


Chart 7 further shows bonds and common stock continue to be the largest source of capital for private utilities. Surplus also contributes a substantial share of total capitalization.

As shown below, Contributions in Aid of Construction is the largest item of municipal utility Capitalization. Surplus and Bonded Debt are next in size Capital Paid in by Municipalities was only about 7.5% of the total at the end of 1987.

A comparison of the capitalization of private and municipal utilities as of December 31, 1987 is presented below:

	Private Utilities	Municipal Utilities
Bonded Indebtedness	41.3%	19.2%
Common Stock or Capital Paid in by Municipality	28.6	7.5
Preferred Stock	3.6	0.0
Surplus	24.3	29.3
Advances from Affiliates or Municipalities	0.0	5.5
Contributions in Aid of Construction	1.7	38.3
Customer Advances in Aid of Construction	0.5	0.2
Total	100.0%	100.0%

Disposition of Income

The term 'gross income' as used here, is a net figure representing total income available to meet interest payments, dividends and similar items. The disposition of gross income is summarized in Table 3 and Charts 9 and 10.

Total gross income of private utilities in Wisconsin totaled $804.5 million in 1987, 2.0% above the preceding year. Interest and related deductions absorbed $259.0 million, preferred stock dividends $17.9 million, dividends on common stock $349.4 million, and $178.2 million were carried to surplus.

Municipal utilities had $67.1 million in gross income in 1987, up 25.4% from the preceding year. Interest and related charges amounted to $34.6 million, $913 thousand were appropriated to municipalities, and $31.6 million were carried to surplus.

Payments during 1987 on each class of security or equity, expressed as a percent of average book values at the beginning and close of the year are compared below:

	Private Utilities	Municipal Utilities
Interest on Long-Term Debt Divided by Long-Term Debt	7.98%	7.28%
Perferred Stock Dividends Divided by Preferred Stocks	7.72	0.00
Common Stock Dividends Divided by Common Stock	18.94	0.00
Appropriations to City Divided by Capital Paid in by Municipality	0.0	0.67
Common Stock Dividends Divided by Common Stock Plus Surplus	10.23	0.00
Appropriations to City Divided by Capital Paid in by Municipality Plus Surplus	0.00	0.14

CHART 9

DISPOSITION OF GROSS INCOME
PRIVATE UTILITIES OPERATING IN WISCONSIN

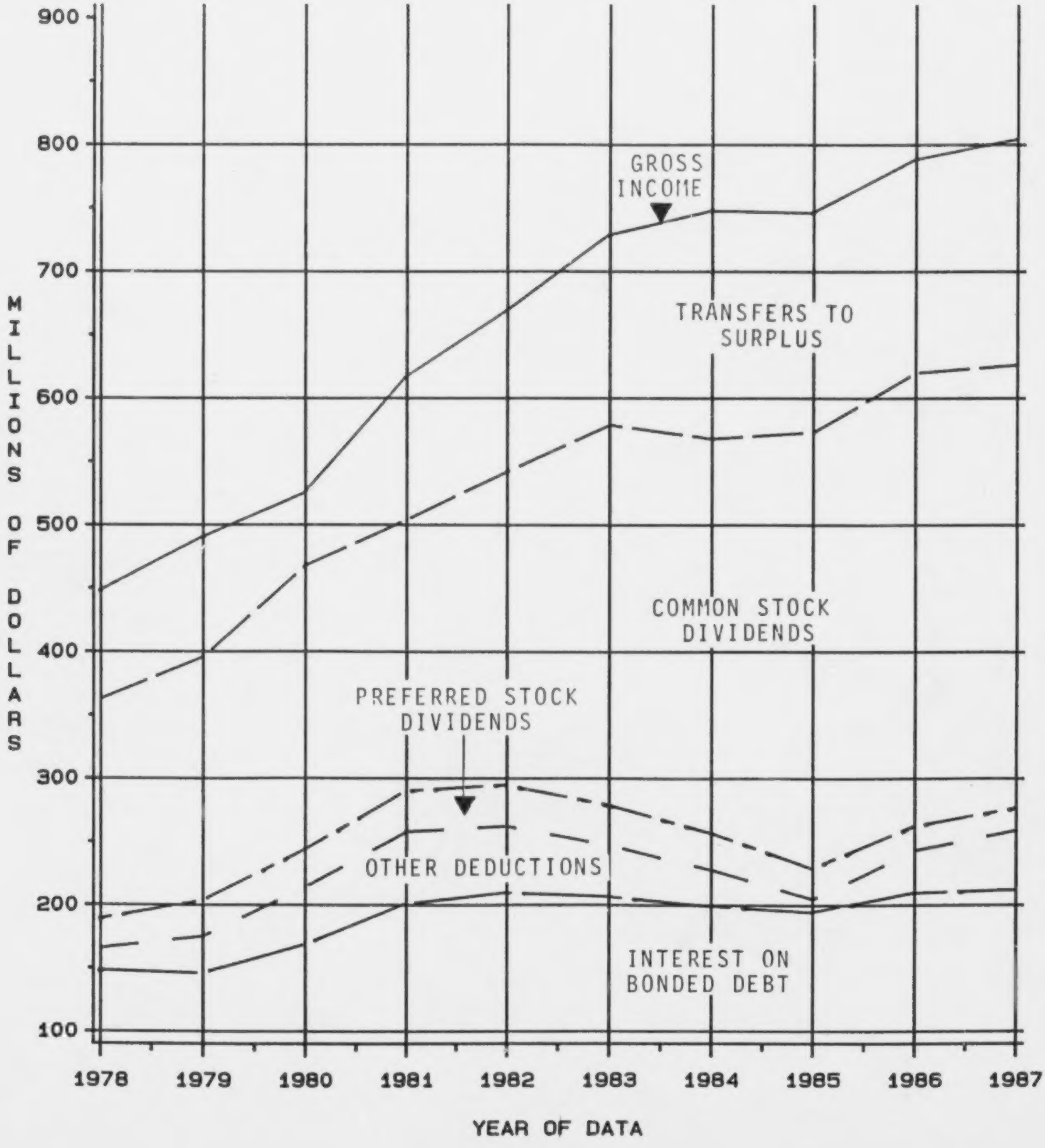


CHART 10

DISPOSITION OF GROSS INCOME
MUNICIPAL UTILITIES OPERATING IN WISCONSIN

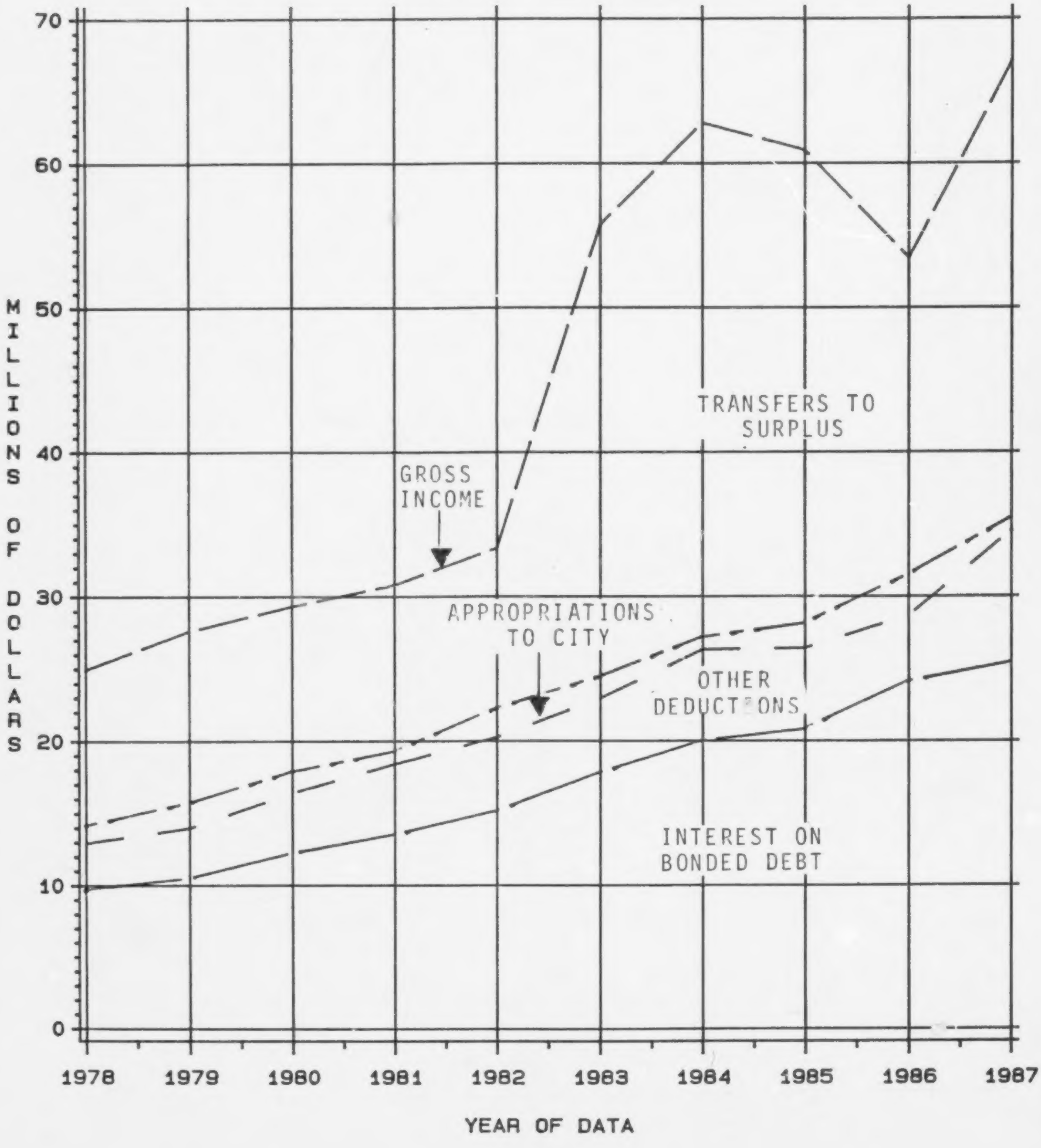


TABLE 1

SUMMARY OF UTILITY PLANT IN SERVICE AND ACCUMULATED PROVISION FOR DEPRECIATION PUBLIC UTILITIES OPERATING IN WISCONSIN 1/

1987-1985

All Utilities	Dec. 31, 1987	Dec. 31, 1986	Dec. 31, 1985
Utility Plant in Service 2/ 3/			
Electric	$ 6,915,424,073	$ 6,390,741,879	$ 5,703,684,631
Gas	1,305,865,416	1,243,722,101	1,156,585,706
Water	1,383,417,979	1,218,413,206	1,212,267,535
Sewer	179,580,359	246,780,185	192,198,158
Telephone	3,753,634,010	3,687,800,000	3,523,067,379
Heating	27,076,140	26,331,551	22,346,770
Total	$13,564,997,977	$12,813,788,922	$11,810,150,179
Accumulated Provision for Depreciation 2/ 3/			
Electric	$ 3,160,410,007	$ 2,934,027,443	$ 2,705,477,425
Gas	617,947,314	571,794,725	525,720,253
Water	290,503,991	264,758,391	263,947,466
Sewer	42,260,391	39,498,665	30,762,481
Telephone	1,303,470,397	1,263,400,000	1,206,971,869
Heating	11,451,485	11,804,001	10,547,264
Total	$ 5,426,043,585	$ 5,085,283,225	$ 4,743,426,758
Utility Plant Less Provision For Depreciation 2/ 3/			
Electric	$ 3,755,014,066	$ 3,456,714,436	$ 2,998,207,206
Gas	687,918,102	671,927,376	630,865,453
Water	1,092,913,988	953,654,815	948,320,069
Sewer	137,319,968	207,281,520	161,435,677
Telephone	2,450,163,613	2,424,400,000	2,316,095,510
Heating	15,624,655	14,527,550	11,799,506
Total	$ 8,138,954,392	$ 7,728,505,697	$ 7,066,723,421
Private Utilities			
Utility Plant in Service 2/ 3/			
Electric	$ 6,640,687,578	$ 6,120,494,505	$ 5,455,740,086
Gas	1,305,210,143	1,243,087,586	1,155,972,095
Water	30,163,519	25,068,725	20,621,782
Sewer	0	0	0
Telephone	3,753,634,010	3,687,800,000	3,523,067,379
Heating	26,762,619	26,018,158	22,039,837
Total	$11,756,457,869	$11,102,468,974	$10,177,441,179

TABLE 1 (Concluded)

SUMMARY OF UTILITY PLANT IN SERVICE AND ACCUMULATED PROVISION FOR DEPRECIATION PUBLIC UTILITIES OPERATING IN WISCONSIN 1/ 1987-1985

Private Utilities (Cont.)	Dec. 31, 1987	Dec. 31,1986	Dec. 31, 1985
Accumulated Provision for Depreciation 2/ 3/			
Electric	$ 3,035,548,463	$ 2,813,754,622	$ 2,592,168,035
Gas	617,669,659	571,535,933	525,480,857
Water	7,684,454	7,069,349	6,625,245
Sewer	0	0	0
Telephone	1,303,470,397	1,263,400,000	1,206,971,869
Heating	11,397,706	11,758,010	10,508,033
Total	$ 4,975,770,679	$ 4,667,517,914	$ 4,341,754,039
Utility Plant Less Provision For Depreciation 2/ 3/			
Electric	$ 3,605,139,115	$ 3,306,739,883	$ 2,863,572,051
Gas	687,540,484	671,551,653	630,491,238
Water	22,479,065	17,999,376	13,996,537
Sewer	0	0	0
Telephone	2,450,163,613	2,424,400,000	2,316,095,510
Heating	15,364,913	14,260,148	11,531,804
Total	$ 6,780,687,190	$ 6,434,951,060	$ 5,835,687,140
Municipal Utilities			
Utility Plant in Service 2/			
Electric	$ 274,736,495	$ 270,247,374	$ 247,944,545
Gas	655,273	634,515	613,611
Water	1,353,254,460	1,193,344,481	1,191,645,753
Sewer	179,580,359	246,780,185	192,198,158
Heating	313,521	313,393	306,933
Total	$ 1,808,540,108	$ 1,711,319,948	$ 1,632,709,000
Accumulated Provision for Depreciation 2/			
Electric	$ 124,861,544	$ 120,272,821	$ 113,309,390
Gas	277,655	258,792	239,396
Water	282,819,537	257,689,042	257,322,221
Sewer	42,260,391	39,498,665	30,762,481
Heating	53,779	45,991	39,231
Total	$ 450,272,906	$ 417,765,311	$ 401,672,719
Utility Plant Less Provision for Depreciation 2/			
Electric	$ 149,874,951	$ 149,974,553	$ 134,635,155
Gas	377,618	375,723	374,215
Water	1,070,434,923	935,655,439	934,323,532
Sewer	137,319,968	207,281,520	161,435,677
Heating	259,742	267,402	267,702
Total	$ 1,358,267,202	$ 1,293,554,637	$ 1,231,036,281

1/ Total plant includes out-of-state properties.
2/ Including apportionment of common property.
3/ Excluding utility plant leased to others.

TABLE 2

COMPARATIVE STATEMENT OF CAPITALIZATION PUBLIC UTILITIES OPERATING IN WISCONSIN 1/ 1987-1985

	Dec. 31, 1987	Dec. 31,1986	Dec. 31, 1985
All Utilities			
Long-Term Debt Outstanding	$ 3,015,128,010	$ 3,173,780,135	$ 2,883,415,778
Advances from Affiliates or Municipality	99,456,786	111,211,671	108,383,135
Preferred Stock Outstanding	232,637,800	239,534,320	275,323,300
Common Stock Outstanding and Related Accounts	1,844,948,758	1,880,459,696	1,877,916,213
Capital Paid in by Municipality	136,767,507	126,758,156	120,160,248
Surplus	2,104,431,826	2,003,892,397	1,900,714,052
Customers' Advances in Aid of Construction	32,564,700	28,671,084	25,453,402
Contributions in Aid of Construction	804,897,516	760,348,795	719,689,717
Total	$ 8,270,832,903	$ 8,324,656,254	$ 7,911,055,845
Private Utilities			
Long-Term Debt Outstanding	$ 2,664,985,091	$ 2,846,439,763	$ 2,559,597,913
Advances from Affiliates	11,500	20,005,000	20,010,000
Preferred Stock Outstanding	232,637,800	239,534,320	275,323,300
Common Stock Outstanding and Related Accounts	1,844,948,758	1,880,459,696	1,877,916,213
Surplus	1,570,250,434	1,511,923,562	1,437,593,845
Customers' Advances in Aid of Construction	29,670,767	25,854,039	22,619,149
Contributions in Aid of Construction	107,750,104	104,481,697	101,864,769
Total	$ 6,450,254,454	$ 6,628,698,077	$ 6,294,925,189
Municipal Utilities			
Long-Term Debt Outstanding	$ 350,142,919	$ 327,340,372	$ 323,817,865
Advances from Municipality	99,445,286	91,206,671	88,373,135
Capital Paid in by Municipality	136,767,507	126,758,156	120,160,248
Surplus	534,181,392	491,968,835	463,120,207
Customers' Advances in Aid of Construction	2,893,933	2,817,045	2,834,253
Contributions in Aid of Construction	697,147,412	655,867,098	617,824,948
Total	$ 1,820,578,449	$ 1,695,958,177	$ 1,616,130,656

1/ These data necessarily represent total company figures. A few companies operate outside of Wisconsin. Electric, gas, water, sewer, heating and telephone utilities are included.

TABLE 3

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1987-1985

	1987	1986	1985
All Utilities			
Net Operating Revenues			
Electric	$448,937,730	$412,920,969	$395,802,509
Gas	60,867,449	61,448,213	78,600,217
Telephone	263,096,653	258,720,180	242,874,710
Water	34,659,397	27,819,199	32,015,522
Sewer	2,721,058	1,858,216	2,841,648
Steam and Hot Water Heating	817,078	1,259,972	1,311,557
Total	$811,099,370	$764,026,749	$753,446,163
Income from Plant Leased to Others	$ 14,621	$ 8,439	$ 57,266
Income from Merchandising and Jobbing	156,289	298,870	205,027
Other Income - Net	60,306,859	77,798,232	53,938,862
Gross Income	$871,577,139	$842,132,290	$807,647,318
Interest on Long-Term Debt	$238,086,911	$234,399,311	$215,824,653
Amortization of Debt Discount and Premium	3,345,214	2,836,131	2,607,509
Interest on Debt to Associated Companies or City	6,496,183	9,566,891	8,480,273
Other Deductions	45,619,891	24,900,564	4,311,071
Net Income	$578,028,940	$570,429,393	$576,423,812
Dividend Appropriations on Preferred Stock	$ 17,965,529	$ 19,516,256	$ 24,670,196
Dividend Appropriations on Common Stock 2/	349,358,768	357,540,268	343,720,435
Appropriations to City	913,191	2,863,974	1,744,201
Balance Transferred to Surplus	$209,791,452	$190,508,895	$206,288,980

(Continued)

TABLE 3 (Continued)

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1987-1985

	1987	1986	1985
Private Utilities			
Net Operating Revenues			
Electric	$438,633,137	$405,647,466	$387,899,602
Gas	60,878,010	61,450,170	78,556,270
Telephone	263,096,658	258,720,180	242,874,710
Water	2,343,695	1,357,420	1,311,966
Sewer	0	0	0
Steam and Hot Water Heating	821,781	1,258,926	1,309,177
Total	$765,773,281	$728,434,162	$711,951,725
Income from Plant Leased to Others	$ 13,221	$ 7,539	$ 56,366
Income from Merchandising and Jobbing	(81,795)	14,746	25,929
Other Income - Net	38,817,052	60,207,284	34,731,734
Gross Income	$804,521,759	$788,663,731	$746,765,754
Interest on Long-Term Debt	$212,599,615	$210,223,272	$194,955,479
Amortization of Debt Discount and Premium	2,401,247	1,855,118	1,697,219
Interest on Debt to Associated Companies	1,209,667	4,145,188	2,894,186
Other Deductions	42,784,291	26,801,984	5,238,778
Net Income	$545,526,939	$545,638,169	$541,980,092
Dividend Appropriations on Preferred Stock	$ 17,965,529	$ 19,516,256	$ 24,670,196
Dividend Appropriations on Common Stock 2/	349,358,768	357,540,268	343,720,435
Balance Transferred to Surplus	$178,202,642	$168,581,645	$173,589,461

TABLE 3 (Concluded)

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1987-1985

	1987	1986	1985
Municipal Utilities			
Net Operating Revenue			
Electric	$10,304,593	$ 7,273,503	$ 7,902,907
Gas	(10,561)	(1,957)	43,947
Water	32,315,702	26,461,779	30,703,556
Sewer	2,721,058	1 858,216	2,841,648
Steam and Hot Water Heating	(4,703)	1,046	2,380
Total	$45,326,089	$35,592,587	$41,494,438
Income from Plant Leased to Others	$ 1,400	$ 900	$ 900
Income from Merchandising and Jobbing	238,084	284,124	179,098
Other Income - Net	21,489,807	17,590,948	19,207,128
Gross Income	$67,055,380	$53,468,559	$60,881,564
Interest on Long-Term Debt	$25,487,296	$24,176,039	$20,869,174
Amortization of Debt Discount and Premium	943,967	981,013	910,290
Interest on Debt to City	5,286,516	5,421,703	5,586,087
Other Deductions	2,835,600	(1,901,420)	(927,707)
Net Income	$32,502,001	$24,791,224	$34,443,720
Appropriations to City	$ 913,191	$ 2,863,974	$ 1,744,201
Balance Transferred to Surplus	$31,588,810	$21,927,250	$32,699,519

1/ Includes out-of-state operations of Wisconsin utilities.
2/ Excluding Stock Dividends.

ELECTRIC UTILITY STATISTICS

Comparative statistics of Wisconsin electric utilities for the 3-year period, 1985 to 1987, are summarized in this section. Out-of-state operations are excluded (except in tables 7, 8 and 9 where data on out-of-state sales, purchases and generating plant are presented).

The following tables and charts present the data covering electric utility operations

Table 4 - Comparative Statement of Revenues and Expenses, 1987-1985
Table 5 - Sales to Ultimate Consumers, 1987-1985
Table 6 - Comparative Statement of Operating Expenses, 1987-1985
Table 7 - Summary of Megawatt Hours Sold and Used, 1987-1985
Table 8 - Megawatt Hours Generated and Purchased, 1987-1985
Table 9 - Generating Plant, Substation and Transmission Line Data, 1987-1985
Table 10 - Condensed Summary of 1987 Operations - Individual Private Electric Utilities
Table 11 - Condensed Summary of 1987 Operations - Individual Municipal Electric Utilities
Chart 11 - Residential Electric Customers - Annual Kilowatt Hour Sales Wisconsin and United States, 1978-1987
Chart 12 - Residential Electric Customers - Revenue per Kilowatt Hour Wisconsin and United States, 1978-1987
Chart 13 - Residential Electric Customers - Average Annual Bill Wisconsin and United States, 1978-1987
Chart 14 - Comparison of Revenues and Expenses, Wisconsin Electric Utilities, 1978-1987
Chart 15 - Revenues from Sales to Ultimate Consumers by Individual Wisconsin Electric Utilities, Percent of Total, 1987

Electric Consumers

The total number of ultimate (retail) electric consumers increased 1.47% over 1986. Residential customers increased 1.49% and rural customers increased 0.18%. Commercial and industrial customers increased 2.53%.

As has already been pointed out, electric cooperatives are not included in the tables. These organizations served an estimated 171,891 customers during 1987. This was 54% of all rural electric customers served in the state.

Revenue and Consumption Ratios

Kilowatt hours sold to ultimate consumers in Wisconsin increased 5.21% during 1987. Commercial and industrial consumption increased 6.90% during the year as did residential at 2.82%. Rural consumption decreased 1.19% for the same period.

State-wide averages by class of service for revenue/megawatt hour are compared below:

	1987	1986	1985
Residential	$66.58	$68.00	$67.03
Commercial and Industrial	49.36	51.60	51.53
Rural	63.72	64.93	63.79
Public St. and Hwy. Lighting	72.48	72.27	70.56
Other Sales to Public Auth.	47.63	50.67	50.56
Interdepartmental Sales	49.86	51.80	52.04
Total Ultimate Consumers	$54.95	$57.06	$56.72

State-wide average ratios of kilowatt hour consumption per customer and revenue per customer are compared below for the three major classes of service:

	1987	1986	1985
Average Annual Use (kWh)			
Residential	7,215	7,121	7,071
Commercial and Industrial	136,089	130,524	128,641
Rural	14,133	14,328	14,588
Average Annual Bill			
Residential	$ 480.39	$ 484.26	$ 473.92
Commercial and Industrial	6,717.32	6,735.50	6,629.38
Rural	900.57	930.40	930.62

Average annual use for residential customers increased by 1.32%, commercial and industrial increased by 4.26% and rural decreased by 1.36%. Average annual bills for residential customers decreased by 0.80%. Commercial and industrial bills and rural bills decreased 0.27% and 3.21% respectively.

Residential revenue and consumption ratios of Wisconsin utilities are compared with national averages over a 9-year period in Charts 11, 12, and 13. In 1987, the average Wisconsin residential customer consumed 21.4% fewer kilowatt hours and paid an average bill that was 28.3% less than the national average.

Electric Utility Income Account

A summary of the income account of Wisconsin electric utilities for the past three years is presented in Table 4. A 9-year graphic comparison is made in Chart 14

Operating revenues continue to rise steadily with 1987 revenues up 1.26% over 1986. Total operating expenses increased 0.36% and net operating revenues increased by 5.86%.

Table 6 presents a detailed analysis of operating expenses, exclusive of depreciation and taxes. Of the classes of expense shown, customer services had the greatest increase which was 69.55%. Transmission was least with (7.30)% decrease.

A comparison of certain expense ratios of private and municipal utilities in 1987 is presented below:

	1987 Expense Ratios					
	Per Dollar of Revenue		Per Average Customer		Per MWh Sold	
	Pvt.(Ct)	Mun.(Ct)	Pvt.	Mun.	Pvt.	Mun.
Production and Trans.	43.30	77.79	$ 572.81	$ 892.56	$ 26.53	$ 39.50
Distribution	5.80	3.52	76.73	40.42	3.55	1.78
Customer Accounts	2.46	1.45	32.61	16.70	1.51	0.74
Customer Services	1.99	0.00	26.25	0.00	1.22	0.00
Sales Promotion 1/	0.05	0.02	0.64	0.18	0.03	0.01
Admin. & General	6.46	4.89	85.47	56.08	3.96	2.48
Total Oper. and Main.	60.06	87.67	794.51	1,005.94	36.80	44.51
Depreciation	10.73	4.33	141.99	49.65	6.58	2.20
Taxes O/T Inc. Taxes	3.68	3.42	48.68	39.29	2.26	1.74
Income Taxes	7.25	0.00	95.80	0.00	4.43	0.00
Total Operating Exp.	81.72	95.42	$1,080.98	$1,094.88	$ 50.07	$ 48.45

1/ Includes customer service expenses for municipally owned utilities.

CHART 11

ANNUAL KILOWATT HOUR SALES RESIDENTIAL ELECTRIC CUSTOMERS

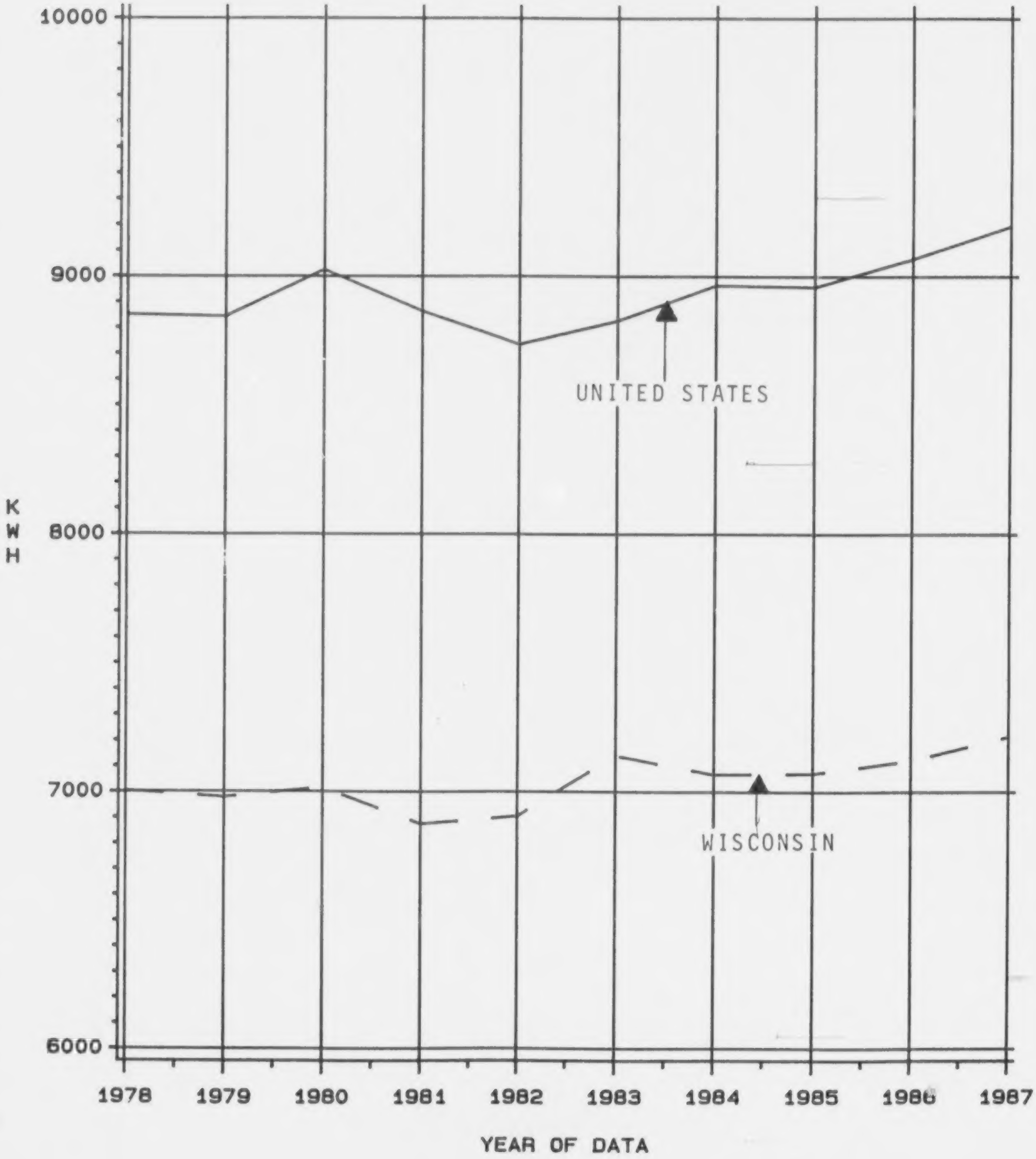


CHART 12
REVENUE PER KILOWATT HOUR RESIDENTIAL ELECTRIC CUSTOMERS

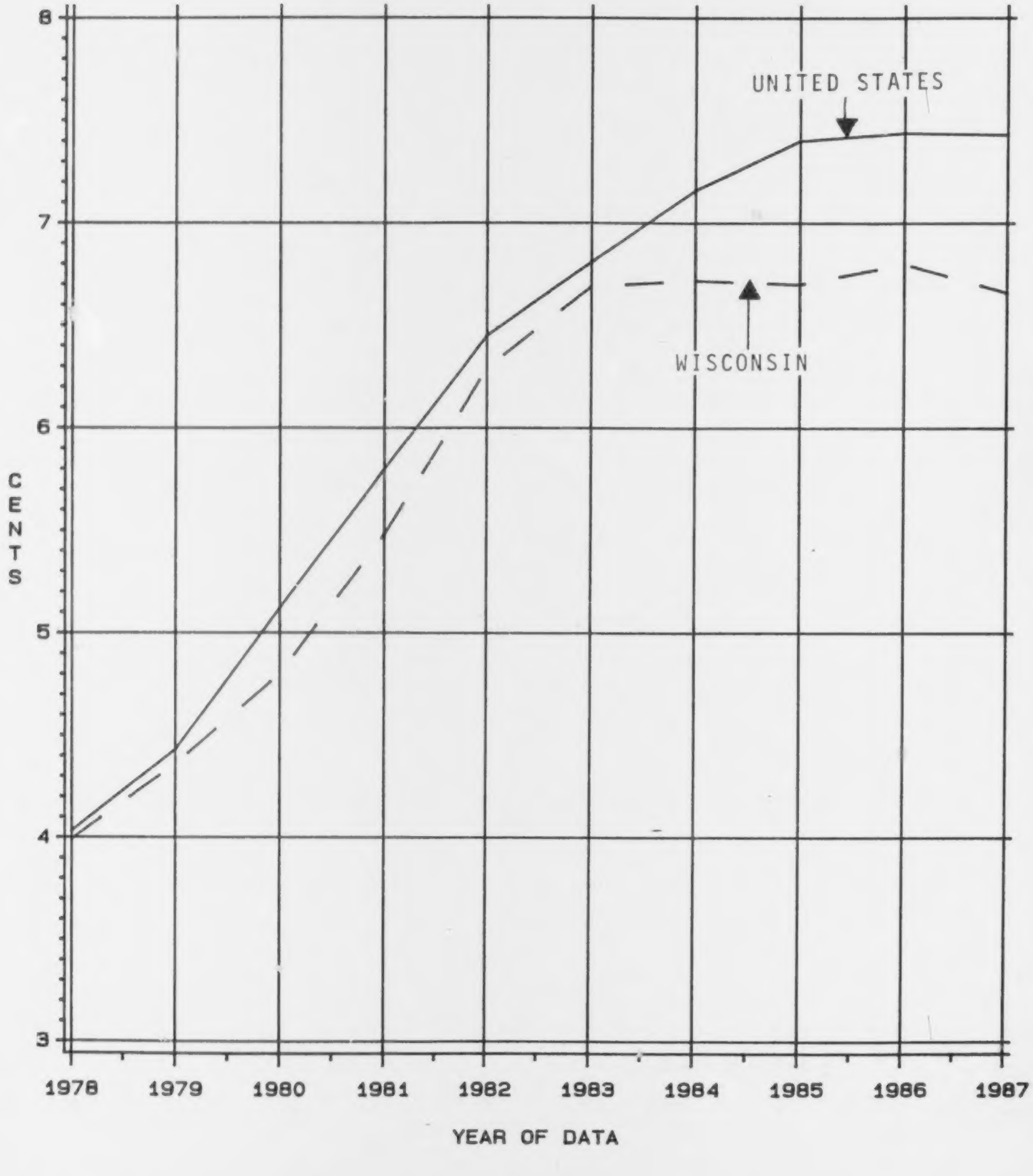


CHART 13
AVERAGE ANNUAL BILL
RESIDENTIAL ELECTRIC CUSTOMERS

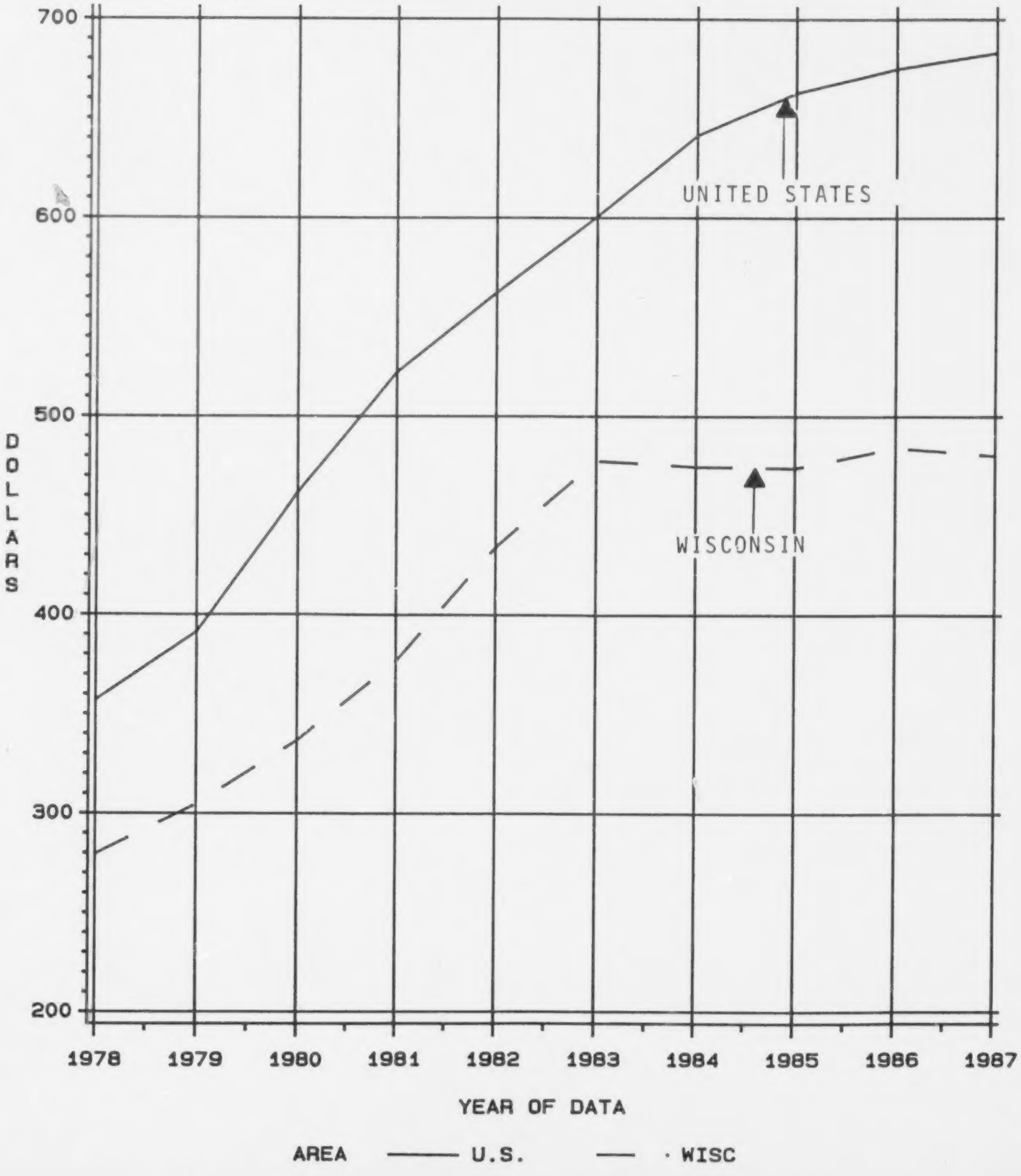
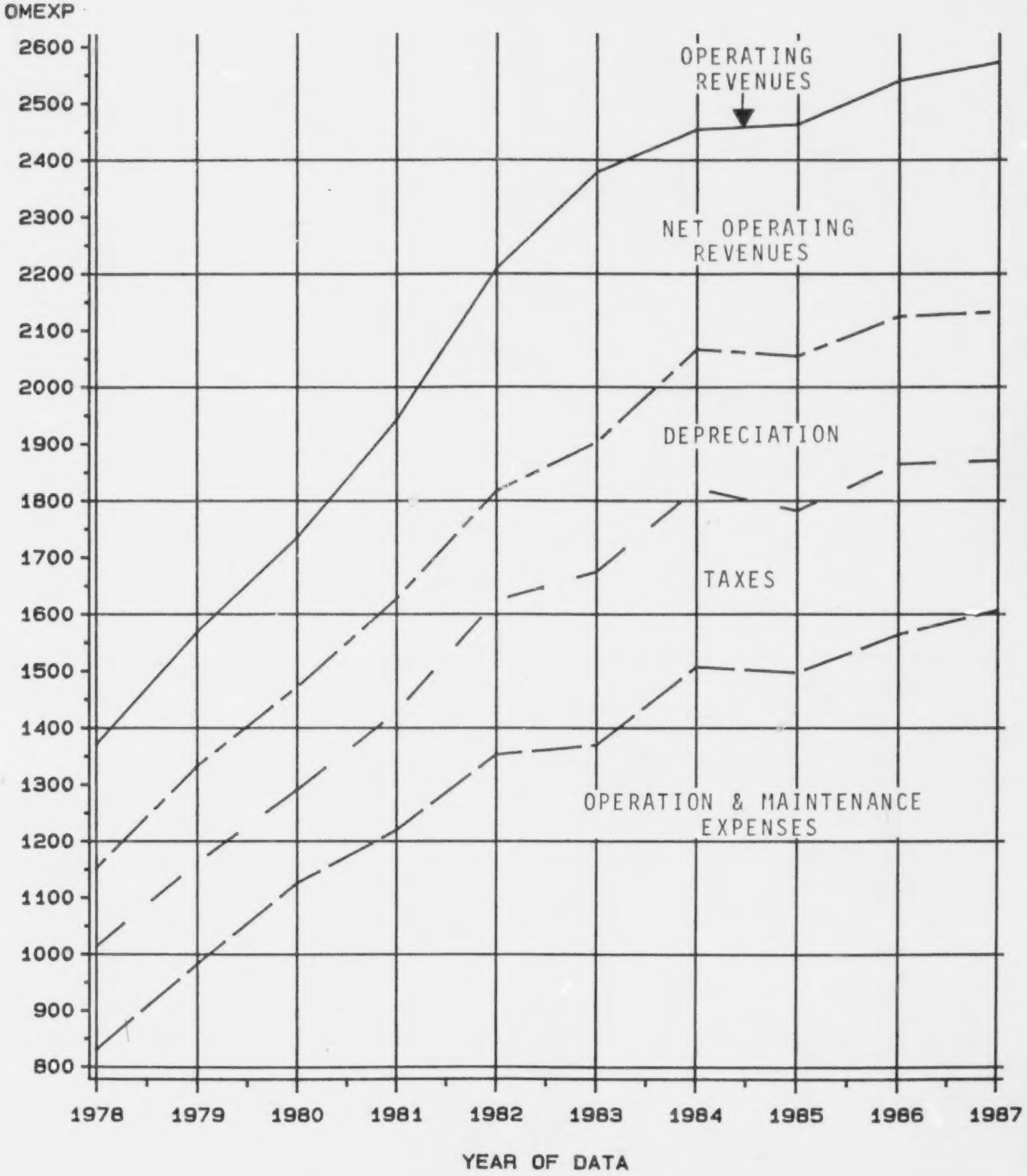


CHART 14

WISCONSIN ELECTRIC UTILITIES REVENUES AND EXPENSES



In addition to the above breakdown of operating expenses, Table 6 presents the detail of production expense on a company-wide basis. If this breakdown is related to corresponding data on generation and purchases, the following comparison of costs per megawatt hour, exclusive of fixed charges, results:

	Production Expense* Per Megawatt Hour Generated or Purchased 1987	
	Private Utilities	Municipal Utilities
Steam Plants-Nuclear Fuel	$ 13.21	$ 0.00
Steam Plants-Fossil Fuel	22.10	51.28
Hydro Electric Plants	11.50	3.52
Internal Combustion (Recip. & Turbine)	137.32	181.83
Purchased Energy	24.99	37.53

*Excludes depreciation, taxes, and return.

Kilowatt Hours Generated and Purchased; Fuel Consumed

The sources of energy of Wisconsin electric utilities are summarized in Table 8. The net generation by plants located in Wisconsin is compared below on a percentage basis over a period of ten years:

	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
Steam-Nuclear	27.9%	28.5%	28.3%	28.2%	25.7%	30.3%	30.1%	28.4%	29.7%	34.3%
Steam-Fossil	69.1	66.7	66.5	66.9	67.0	63.9	64.5	65.9	62.9	58.1
Hydro	2.9	4.8	5.2	4.8	7.1	5.6	4.8	4.6	5.0	5.1
Int. Comb.-Recip.	1/	1/	1/	1/	1/	1/	1/	0.1	0.1	0.2
Int. Comb.-Turbine	0.1	1/	1/	0.1	0.2	0.2	0.6	1.0	2.3	2.3
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

During the ten years covered, fossil steam generating plants have produced a major portion of the State's electric energy, varying from a high of 69.1% in 1987 to a low of 58.1% in 1978. Privately owned utilities generated 99.1% of total energy produced by utilities in 1987. The most significant change has been the nuclear plants which generated no energy in 1970 but now produce about 28% of the total.

Fuel consumption ratios over the past five years are presented below:

	1987	1986	1985	1984	1983
BTU's of Fuel Used in Nuclear Steam Plants Per kWh Generated (Net)	10,576	10,579	10,569	10,580	10,816
BTU's of Fuel Used in Fossil Steam Plants Per kWh Generated (Net)	10,894	10,926	10,516	10,939	10,920
BTU's of Fuel Used in Turbine Plants Per kWh Generated (Net)	17,926	17,967	18,185	17,954	16,378
BTU's of Fuel Used in Reciprocating Plants Per kWh Generated (Net)	12,336	5,912	9,450	11,268	10,810

1/ Less than 0.05%.

Generating Plant and Transmission Line Data

Data on the capacity of generating plants and miles of transmission pole line are presented in Table 9. The total capacity of all generating plants operated by Wisconsin utilities as of December 1987 was about 10,000 megawatts of which about 100 megawatts were in plants located outside the State. Of the capacity of plants located in Wisconsin, 15.0% is steam-nuclear, 68.4% is steam-fossil, 3.4% is hydro, 1.0% is by reciprocating engines, and 12.2% is turbine.

About 9,328 miles of transmission line were in service at the close of 1987 of which about 4,521 miles carry voltage in excess of 100,000 volts.

Data on Individual Utilities

Table 10 presents selected operating data covering the year 1987 for each Class A, B, and C private electric utility in the State and Table 11 presents similar data on each Class A, B, C and D municipal electric utility. Chart 15 shows the percentage distribution by companies of electric operating revenue from sales to ultimate consumers. Four large private utilities account for 83.5% of the total. Municipal utilities make up 8.7%.

Table 10 shows that private utilities as a group generated a large part of their energy requirements while Table 11 shows that municipal utilities purchase most of their requirements. Of the 82 individual municipal utilities listed, only 20 generated some electricity.

CHART 15

REVENUES OF WISCONSIN ELECTRIC UTILITIES IN PERCENT OF TOTAL SALES TO ULTIMATE CONSUMERS

1987

SUM OF PERCENT BY UTILITY

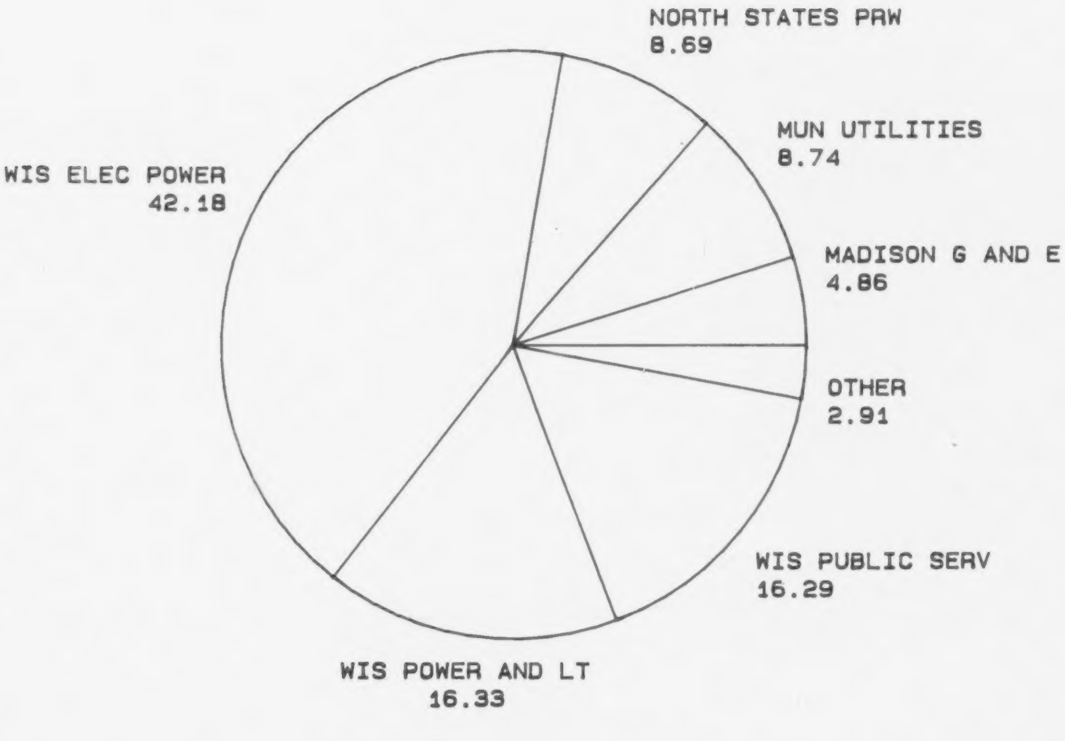


TABLE 4

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1987-1985

	1987	1986	1985
All Electric Utilities			
Operating Revenues			
Sales to Ultimate Consumers	$ 2,348,090,849	$ 2,317,491,821	$ 2,247,768,797
Sales to Other Utilities	193,846,624	187,716,164	183,552,864
Sales to Electric Cooperatives	14,280,874	14,054,043	12,870,339
Miscellaneous Revenues	15,742,846	20,800,722	18,844,429
Total Operating Revenues	$ 2,571,961,193	$ 2,540,062,750	$ 2,463,036,429
Operating Revenue Deductions			
Operation and Maintenance	$ 1,606,884,609	$ 1,564,401,694	$ 1,496,886,478
Depreciation and Amortization	261,665,180	260,022,458	272,654,856
Taxes Other than Income Taxes	94,078,809	107,063,303	69,866,428
Income Taxes	169,992,564	193,543,558	215,329,135
Total Operating Expenses	$ 2,132,621,162	$ 2,125,031,013	$ 2,054,736,897
Net Operating Revenues	$ 439,340,031	$ 415,031,737	$ 408,299,532
Private Electric Utilities			
Operating Revenues			
Sales to Ultimate Consumers	$ 2,127,879,947	$ 2,097,870,167	$ 2,038,104,646
Sales to Other Utilities	193,557,874	187,397,280	183,163,448
Sales to Electric Cooperatives	14,280,874	14,054,043	12,870,339
Miscellaneous Revenues	11,390,237	16,890,617	15,192,006
Total Operating Revenues	$ 2,347,108,932	$ 2,316,212,107	$ 2,249,330,439
Operating Revenue Expenses			
Operation and Maintenance	$ 1,409,765,097	$ 1,363,815,549	$ 1,305,606,288
Depreciation and Amortization	251,936,558	251,083,928	264,369,410
Taxes Other than Income Taxes	86,379,275	100,010,838	63,628,979
Income Taxes	169,992,564	193,543,558	215,329,135
Total Operating Expenses	$ 1,918,073,494	$ 1,908,453,873	$ 1,848,933,812
Net Operating Revenues	$ 429,035,438	$ 407,758,234	$ 400,396,627

(Continued)

TABLE 4 (Concluded)

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1987-1985

Municipal Electric Utilities	1987	1986	1985
Operating Revenues			
Sales to Ultimate Consumers	$ 220,210,902	$ 219,621,654	$ 209,664,151
Sales to Other Electric Utilities	288,750	318,881	389,416
Sales to Electric Cooperatives	0	0	0
Miscellaneous Operating Revenues	4,352,609	3,910,105	3,652,423
Total Operating Revenues	$ 224,852,261	$ 223,850,643	$ 213,705,990
Operating Revenue Expenses			
Operation and Maintenance	$ 197,119,512	$ 200,586,145	$ 191,280,190
Depreciation and Amortization	9,728,622	8,938,530	8,285,446
Taxes Other than Income Taxes	7,699,534	7,052,465	6,237,449
Total Operating Expenses	$ 214,547,668	$ 216,577,140	$ 205,803,085
Net Operating Revenues	$ 10,304,593	$ 7,273,503	$ 7,902,905

1/ Excluding out-of-state operations.

TABLE 5

SALES TO ULTIMATE CONSUMERS BY CLASS
WISCONSIN ELECTRIC UTILITIES 1/
1987-1985

All Electric Utilities	1987		1986
Revenues			
Residential	$ 773,504,459	$ 768,327,167	$ 743,994,944
Commercial and Industrial	1,396,637,348	1,365,818,511	1,323,184,554
Rural	132,123,937	136,256,541	133,300,453
Public Street and Highway Lighting	29,303,918	29,890,493	30,248,012
Other Sales to Public Authorities	11,860,216	12,551,824	12,627,049
Interdepartmental Sales	4,660,971	4,647,284	4,413,785
Total Revenue from Ultimate Consumers	$2,348,090,849	$2,317,491,820	$2,247,768,797
Megawatt Hours Sold			
Residential	11,617,410	11,298,316	11,100,196
Commercial and Industrial	28,295,071	26,467,579	25,676,013
Rural	2,073,424	2,098,377	2,089,620
Public Street and Highway Lighting	404,304	413,574	428,706
Other Sales to Public Authorities	249,021	247,741	249,733
Interdepartmental Sales	93,490	89,717	84,822
Total Megawatt Hours Sold to Ultimate Consumers	42,732,720	40,615,304	39,629,090
Average Number of Customers 2/			
Residential	1,610,171	1,586,593	1,569,878
Commercial and Industrial	207,916	202,779	199,594
Rural	146,711	146,450	143,239
Public Street and Highway Lighting	4,477	4,940	3,858
Other Sales to Public Authorities	965	964	881
Interdepartmental Sales	100	105	109
Total Ultimate Consumers	1,970,340	1,941,831	1,917,559

(Continued)

TABLE 5 (Continued)

SALES TO ULTIMATE CONSUMERS BY CLASS
WISCONSIN ELECTRIC UTILITIES 1/
1987-1985

Private Electric Utilities	1987	1986	1985
Revenues			
Residential	$ 711,717,062	$ 707,314,266	$ 684,624,559
Commercial and Industrial	1,258,104,390	1,227,763,428	1,192,920,802
Rural	120,240,976	123,720,382	121,064,027
Public Street and Highway Lighting	25,440,684	26,126,097	26,472,653
Other Sales to Public Authorities	10,489,571	11,058,598	11,198,706
Interdepartmental Sales	1,887,264	1,887,395	1,823,899
Total Revenue from Ultimate Consumers	$2,127,879,947	$2,097,870,166	$2,038,104,646
Megawatt Hours Sold			
Residential	10,443,308	10,148,312	9,963,546
Commercial and Industrial	25,385,143	23,655,154	23,029,158
Rural	1,858,595	1,874,210	1,868,220
Public Street and Highway Lighting	355,883	364,574	377,054
Other Sales to Public Authorities	224,148	226,330	224,753
Interdepartmental Sales	37,472	35,881	34,132
Total Megawatt Hours Sold to Ultimate Consumers	38,304,549	36,304,461	35,496,863
Average Number of Customers 2/			
Residential	1,457,549	1,435,692	1,420,592
Commercial and Industrial	182,383	177,838	175,209
Rural	130,120	129,312	126,357
Public Street and Highway Lighting	3,701	3,682	3,697
Other Sales to Public Authorities	624	615	615
Interdepartmental Sales	7	8	8
Total Ultimate Consumers	1,774,384	1,747,147	1,726,478

(Continued)

TABLE 5 (Concluded)

SALES TO ULTIMATE CONSUMERS BY CLASS
WISCONSIN ELECTRIC UTILITIES 1/
1987-1985

Municipal Electric Utilities	1987	1986	1985
Revenues			
Residential	$ 61,787,397	$ 61,012,901	$ 59,370,385
Commercial and Industrial	138,532,958	138,055,083	130,263,752
Rural	11,882,961	12,536,159	12,236,426
Public Street and Highway Lighting	3,863,234	3,764,396	3,775,359
Other Sales to Public Authorities	1,370,645	1,493,226	1,428,343
Interdepartmental Sales	2,773,707	2,759,889	2,589,886
Total Revenue from Ultimate Consumers	$220,210,902	$219,621,654	$209,664,151
Megawatt Hours Sold			
Residential	1,174,102	1,150,004	1,136,650
Commercial and Industrial	2,909,928	2,812,425	2,646,855
Rural	214,829	224,167	221,400
Public Street and Highway Lighting	48,421	49,000	51,652
Other Sales to Public Authorities	24,873	21,411	24,980
Interdepartmental Sales	56,018	53,836	50,690
Total Megawatt Hours Sold to Ultimate Consumers	4,428,171	4,310,843	4,132,227
Average Number of Customers 2/			
Residential	152,622	150,901	149,286
Commercial and Industrial	25,533	24,941	24,385
Rural	16,591	17,138	16,882
Public Street and Highway Lighting	776	1,258	161
Other Sales to Public Authorities	341	349	266
Interdepartmental Sales	93	97	101
Total Ultimate Consumers	195,956	194,684	191,081

1/ Excluding out-of-state operations.

2/ Heating, cooking and yard lighting customers on separate rates are not included in customer data, as they would be duplications.

TABLE 6

COMPARATIVE STATEMENT OF OPERATION AND MAINTENANCE EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1987-1985

All Electric Utilities	1987	1986	1985
Production Expense-Total Company			
Steam-Nuclear Fuel	$ 147,695,561	$ 139,737,284	$ 143,135,663
Steam-Fossil Fuel	619,237,659	651,786,455	640,082,791
Hydraulic	16,309,942	16,080,458	15,293,389
Int. Comb.-Recip. and Turbine	6,418,777	6,874,329	5,115,954
Purchases or Net Interchanges	382,252,856	357,861,819	360,325,071
Other Power Supply	6,407,531	6,163,572	1,599,173
Total Production Expense	$1,178,322,326	$1,178,503,917	$1,165,552,041
Amount Applicable to Out-of-State Sales	5,397,121	14,261,997	48,687,011
Amount Applicable to Wisconsin Sales	$1,172,925,205	$1,164,241,920	$1,116,865,030
Operation and Maintenance - Wisconsin Only			
Production	$1,172,925,205	$1,164,241,920	$1,116,865,030
Transmission 2/	18,361,675	19,808,541	19,122,712
Distribution 2/	144,069,338	138,644,498	129,100,783
Customer Accounts	61,126,077	59,846,588	56,771,080
Sales Promotion 3/	1,176,560	878,916	1,341,255
Customer Service	46,579,595	27,473,282	22,079,320
Administrative and General	162,646,159	153,507,949	151,606,298
Total	$1,606,884,609	$1,564,401,694	$1,496,886,478
Private Electric Utilities			
Production Expense - Total Company			
Steam-Nuclear Fuel	$ 147,695,561	$ 139,737,284	$ 143,135,663
Steam-Fossil Fuel	606,593,495	638,040,175	626,919,834
Hydraulic	15,932,422	15,685,370	14,828,695
Int. Comb.-Recip. and Turbine	5,793,638	6,216,259	4,417,471
Purchases or Net Interchanges	221,401,158	193,618,563	203,392,129
Other Power Supply	6,212,529	5,966,851	1,598,993
Total Production Expense	$1,003,628,803	$ 999,264,502	$ 994,292,785
Amount Applicable to Out-of-State Sales	5,397,121	14,261,997	48,687,011
Amount Applicable to Wisconsin Sales	$ 998,231,682	$ 985,002,505	$ 945,605,774
Operation and Maintenance - Wisconsin Only			
Production	$ 998,231,682	$ 985,002,505	$ 945,605,774
Transmission 2/	18,153,380	19,632,622	18,991,999
Distribution 2/	136,148,896	130,880,164	121,529,896
Customer Accounts	57,854,539	56,605,114	53,509,291
Sales Promotion	1,145,098	864,473	1,331,409
Customer Service	46,575,971	27,470,182	22,076,257
Administrative and General	151,655,531	143,360,489	142,561,662
Total	$1,409,765,097	$1,363,815,549	$1,305,606,288

TABLE 6 (Concluded)

COMPARATIVE STATEMENT OF OPERATION AND MAINTENANCE EXPENSE
WISCONSIN ELECTRIC UTILITIES 1/
1987-1985

Municipal Electric Utilities	1987	1986	1985
Production Expense			
Steam-Fossil Fuel	$ 12,644,164	$ 13,746,280	$ 13,162,957
Hydraulic	377,520	395,088	464,694
Int. Com.-Recip. and Turbine	625,139	658,070	698,483
Purchases or Net Interchanges	160,851,698	164,243,256	156,932,942
Other Power Supply	195,002	196,721	180
Total Production Expense	$ 174,693,523	$ 179,239,415	$ 171,259,256
Transmission 2/	208,295	175,919	130,713
Distribution 2/	7,920,442	7,764,334	7,570,887
Customer Accounts	3,271,538	3,241,474	3,261,789
Sales 3/	35,086	17,543	12,909
Administrative and General	10,990,628	10,147,460	9,044,636
Total	$ 197,119,512	$ 200,586,145	$ 191,280,190

1/ Out-of-state operations of Wisconsin Utilities are not included except in detail of production expenses, as indicated.

2/ Transmission and distribution expenses are combined in the Class D report forms. These utilities are assumed to have no transmission expense.

3/ Includes customer service expense for municipal utilities.

TABLE 7

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1987-1985

All Electric Utilities	1987	1986	1985
MWh Sold to Ultimate Customers (Wisconsin Only)	42,732,720	40,615,304	39,629,090
MWh Sold to Other Electric Utilities	5,331,291	4,893,748	4,759,561
MWh sold at State Line	0	0	125,953
MWh sold to Electric Coops.	405,780	382,951	358,479
Total MWh Sold in Wisconsin 1/	48,469,791	45,892,003	44,873,083
MWh Used by Utilities	120,752	122,465	138,345
Total MWh Sold & Used in Wisconsin 1/	48,590,543	46,014,468	45,011,428
MWh Sold Out of State			
Sales to Ultimate Consumers	610,912	585,340	581,313
Sales to Electric Utilities and Cooperatives	1,258,568	1,114,032	1,357,054
Total MWh Sold Out of State	1,869,480	1,699,372	1,938,367
MWh Used by Utilities Out of State	3,209	6,630	2,430
Total MWh Sold & Used Out of State	1,872,689	1,706,002	1,940,797
Total MWh Sold & Used	50,463,232	47,720,470	46,952,225
MWh Unaccounted for	3,096,545	2,964,303	3,060,538
Total MWh Generated and Purchased Purchased 1/	53,559,777	50,684,773	50,012,763

(Continued)

TABLE 7 (Continued)

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1987-1985

	1987	1986	1985
Private Electric Utilities			
MWh Sold to Ultimate Customers (Wisconsin Only)	38,304,549	36,304,461	35,496,863
MWh Sold to Other Electric Utilities	5,329,448	4,892,480	4,756,083
MWh Sold at State Line	0	0	125,953
MWh Sold to Electric Cooperatives	405,780	382,951	358,479
Total MWh Sold in Wisconsin 1/	44,039,777	41,579,892	40,737,378
MWh Used by Utilities	111,881	106,645	136,452
Total MWh Sold & Used in Wisconsin 1/	44,151,658	41,686,537	40,873,830
MWh Sold Out of State			
Sales to Ultimate Consumers	610,912	585,340	581,313
Sales to Electric Utilities & Cooperatives	1,258,568	1,114,032	1,357,054
Total MWh Sold Out of State	1,869,480	1,699,372	1,938,367
MWh Used by Utilities Out of State	3,209	6,630	2,430
Total MWh Sold & Used Out of State	1,872,689	1,706,002	1,940,797
Total MWh Sold and Used	46,024,347	43,392,539	42,814,627
MWh Unaccounted for	2,892,575	2,761,517	2,837,791
Total MWh Generated and Purchased 1/	48,916,922	46,154,056	45,652,418

(Continued)

TABLE 7 (Concluded)

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1987-1985

	1987	1986	1985
Municipal Electric Utilities			
MWh Sold to Ultimate Customers (Wisconsin Only)	4,428,171	4,310,843	4,132,227
MWh Sold to Other Electric Utilities	1,843	1,268	3,478
MWh Sold to Electric Coops.	0	0	0
Total MWh Sold in Wisconsin 1/	4,430,014	4,312,111	4,135,705
MWh Used by Utilities	8,871	15,820	1,893
Total MWh Sold or Used in Wisconsin 1/	4,438,885	4,327,931	4,137,598
MWh Sold Out of State			
Sales to Ultimate Consumers	0	0	0
Sales to Electric Utilities & Cooperatives	0	0	0
Total MWh Sold Out of State	0	0	0
MWh Used by Utilities Out of State	0	0	0
Total MWh Sold and Used Out of State	0	0	0
Total MWh Sold and Used	4,438,885	4,327,931	4,137,598
MWh Unaccounted for	203,970	202,786	222,747
Total MWh Generated and Purchased 1/	4,642,855	4,530,717	4,360,345

1/ To avoid double counting subtract "MWh Sold to Other Utilities".

TABLE 8

MEGAWATT HOURS GENERATED AND PURCHASED
WISCONSIN ELECTRIC UTILITIES
1987-1985

All Electric Utilities	1987	1986	1985
Net Generation in Wisconsin			
Steam - Nuclear Fuel	11,178,886	11,039,856	10,654,941
Steam - Fossil Fuel	27,696,375	25,905,900	25,068,520
Hydraulic	1,138,524	1,847,361	1,949,931
Internal Combustion - Recip.	3,614	3,849	4,962
Internal Combustion - Turbine	42,015	46,508	15,212
Total	40,059,414	38,843,474	37,693,566
Net Generation Outside Wisconsin by Wisconsin Companies			
Hydraulic	354,159	436,352	543,610
Internal Combustion - Recip.	0	0	0
Total	354,159	436,352	543,610
Total Megawatt Hours Generated			
Steam - Nuclear Fuel	11,178,886	11,039,856	10,654,941
Steam - Fossil Fuel	27,696,375	25,905,900	25,068,520
Hydraulic	1,492,683	2,283,713	2,493,541
Internal Combustion - Recip.	3,614	3,849	4,962
Internal Combustion - Turbine	42,015	46,508	15,212
Total	40,413,573	39,279,826	38,237,176
Megawatt Hours Purchased Plus Net Interchanges			
From Wisconsin Electric Utils. 2/	5,315,444	8,845,408	9,389,128
From Out-of-State Elec. Utils. 3/	4,188,213	0	(2,127,439)
From Electric Cooperatives	1,977,167	1,634,381	1,502,262
From Other Non-Utility Companies	1,665,379	925,158	3,011,636
Total	13,146,204	11,404,947	11,775,587
Total Megawatt Hours Generated and Purchased 2/	53,559,777	50,684,773	50,012,763
Tons of Coal Used in Steam Plants	15,530,512	12,234,977	13,797,648
Gallons of Fuel Oil Used in Steam Plants	4,208,820	5,585,748	7,912,464
Therms of Natural Gas Used in Steam Plants	9,859,508	10,645,370	11,373,778
Tons of Wood in Steam Plants	247,498	186,552	153,353
Gallons of Fuel Oil Used in Internal Combustion-Recip. Plants	115,468	184,101	207,356
Therms of Natural Gas Used in Internal Combustion-Recip. Plants	98,050	444,400	277,248
Gallons of Fuel Oil Used in Internal Combustion-Turbine Plts.	2,175,978	4,076,772	979,440
Therms of Natural Gas Used in Internal Combustion-Turbine Plts.	4,757,116	2,577,164	2,434,179

TABLE 8 (Continued)

MEGAWATT HOURS GENERATED AND PURCHASED
WISCONSIN ELECTRIC UTILITIES
1987-1985

Private Electric Utilities 1/	1987	1986	1985
Net Generation in Wisconsin			
Steam - Nuclear Fuel	11,178,886	11,039,856	10,654,941
Steam - Fossil Fuel	27,449,786	25,648,191	24,829,399
Hydraulic	1,031,419	1,725,266	1,832,597
Internal Combustion - Recip.	541	747	564
Internal Combustion - Turbine	41,650	46,322	15,057
Total	39,702,282	38,460,382	37,332,558
Net Generation Outside Wisconsin by Wisconsin Companies			
Hydraulic	354,159	436,352	543,610
Internal Combustion - Recip.	0	0	0
Total	354,159	436,352	543,610
Total Megawatt Hours Generated			
Steam - Nuclear Fuel	11,178,886	11,039,856	10,654,941
Steam - Fossil Fuel	27,449,786	25,648,191	24,829,399
Hydraulic	1,385,578	2,161,618	2,376,207
Internal Combustion - Recip.	541	747	564
Internal Combustion - Turbine	41,650	46,322	15,057
Total	40,056,441	38,896,734	37,876,168
Megawatt Hours Purchased Plus Net Interchanges			
From Wisconsin Electric Utilities 2/	1,163,537	4,822,356	5,515,582
From Out-of-State Elec. Utils. 3/	4,188,213	0	(2,127,439)
From Electric Cooperatives	1,846,395	1,510,389	1,379,046
From Other Non-Utility Companies	1,662,336	924,577	3,009,061
Total	8,860,481	7,257,322	7,776,250
Total Megawatt Hours Generated and Purchased 2/	48,916,922	46,154,056	45,652,418
Tons of Coal Used in Steam Plants	15,364,673	12,047,798	13,641,631
Gallons of Fuel Oil Used in Steam Plants	4,208,820	5,585,748	7,912,464
Therms of Natural Gas Used in Steam Plants	9,859,508	10,645,370	11,373,778
Tons of Wood in Steam Plants	247,498	186,552	153,353
Gallons of Fuel Oil Used in Internal Combustion-Recip. Plants	51,996	63,462	49,258
Therms of Natural Gas Used in Internal Combustion-Recip. Plants	0	442,490	0
Gallons of Fuel Oil Used in Internal Combustion-Turbine Plts.	2,162,370	4,076,772	979,440
Therms of Natural Gas Used in Internal Combustion-Turbine Plts.	4,743,646	2,573,626	2,399,079

TABLE 8 (Concluded)

MEGAWATT HOURS GENERATED AND PURCHASED
WISCONSIN ELECTRIC UTILITIES
1987-1985

Municipal Electric Utilities	1987	1986	1985
Net Generation in Wisconsin			
Steam - Fossil Fuel	246,589	257,709	239,121
Hydraulic	107,105	122,095	117,334
Internal Combustion - Recip.	3,073	3,102	4,398
Internal Combustion - Turbine	365	186	155
Total	357,132	383,092	361,008
Megawatt Hours Purchased plus Net Interchanges			
From Wisconsin Electric Utils.2/	4,151,908	4,023,052	3,873,546
From Electric Cooperatives	130,772	123,992	123,216
From Other Non-Utility Companies	3,043	581	2,575
Total	4,285,723	4,147,625	3,999,337
Total Megawatt Hours Generated and Purchased 2/	4,642,855	4,530,717	4,360,345
Tons of Coal Used in Steam Plants	165,839	234,427	156,017
Gallons of Fuel Oil Used in Steam Plants	0	0	0
Therms of Natural Gas Used in Steam Plants	0	0	0
Gallons of Fuel Oil Used in Internal Combustion-Recip. Plants	63,472	120,639	158,098
Therms of Natural Gas Used in Internal Combustion-Recip. Plants	98,050	1,910	277,248
Gallons of Fuel Oil Used in Internal Combustion-Turbine Plants	13,608	0	0
Therms of Natural Gas Used in Internal Combustion-Turbine Plants	13,470	3,538	35,100

1/ Experimental generation using windmills and photo voltaics is being done by some utilities. These plants will be included in the Bulletin if and when they produce a significant amount of commercial power.

2/ Energy included in "Purchased from Wisconsin Electric Utilities" is also included in the generation figures. Therefore, to avoid double counting, you should subtract "Purchased from Wisconsin Electric Utilities" from the "Total Megawatt Hours Generated and Purchased" figure.

3/ Includes purchases delivered in Wisconsin or at state line.

TABLE 9

GENERATING PLANT AND TRANSMISSION LINE DATA
WISCONSIN ELECTRIC UTILITIES
1987-1985

Capacity of Generators in Kilowatts	1987	1986	1985
All Plants in Wisconsin			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	7,048,528	7,052,828	7,152,528
Hydraulic	354,342	354,342	355,030
Internal Combustion - Recip.	98,455	108,627	111,000
Internal Combustion - Turbine	1,257,450	1,251,950	1,285,950
Total	10,299,457	10,308,429	10,445,190
Private Utility Plants in Wisconsin			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	6,911,348	6,907,648	7,003,848
Hydraulic	335,710	335,710	336,145
Internal Combustion-Recip.	24,640	24,640	27,331
Internal Combustion-Turbine	1,237,450	1,231,950	1,265,950
Total	10,049,830	10,040,630	10,173,956
Municipal Utility Plants in Wisconsin			
Steam - Fossil Fuel	137,180	145,180	148,680
Hydraulic	18,632	18,632	18,885
Internal Combustion-Recip.	73,815	83,987	83,669
Internal Combustion-Turbine	20,000	20,000	20,000
Total	249,627	267,799	271,234
Plants Located Outside Wisconsin Operated by Wisconsin Utils. 1/			
Hydraulic	99,990	99,990	99,990
Total	99,990	99,990	99,990
Total Plants Operated by Wisconsin Utilities			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	7,048,528	7,052,828	7,152,528
Hydraulic	454,332	454,332	455,020
Internal Combustion-Recip.	98,455	108,627	116,042
Internal Combustion-Turbine	1,257,450	1,251,950	1,285,950
Total	10,399,447	10,408,419	10,550,222
Miles of Transmission Pole or Tower (Including Out-of-State)			
Over 100,000 Volts	4,521	4,412	4,393
Less than 100,000 Volts	4,807	4,856	4,838

1/ Out-of-State plants are all owned by private electric utilities.

TABLE 10

CONDENSED SUMMARY OF 1987 OPERATIONS
INDIVIDUAL PRIVATE ELECTRIC UTILITIES 1/

Utilities	Operating Revenues 2/	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Net Operating Revenue	Total MWh Sold 2/	Average Number of Consumers 3/	MWh Generated 4/	MWh Purchased 4/
Class A, B, and C										
Consolidated Water Power Co.	$ 33,082,965	$ 32,522,554	$ 829,521	$ 161,501	$ (319,994)	$ (110,617)	892,329	1,009	104,159	795,407
Dahlberg Light & Power Co.	4,671,421	3,488,029	363,987	127,799	172,338	519,268	55,227	8,109	2,057	59,922
Madison Gas and Electric Co.	124,881,666	72,152,878	15,941,910	5,589,393	6,936,242	24,261,243	2,090,519	106,698	2,036,991	167,387
North Central Power Co.	1,504,490	1,052,576	112,500	51,229	62,008	226,177	20,590	3,125	6,237	17,357
Northern States Power Co.	223,534,749	157,462,049	20,653,030	9,352,915	12,883,021	23,183,734	4,525,673	181,356	776,093	4,324,520 4/
Northwestern Wisconsin Electric Co.	6,723,566	4,819,918	653,248	190,826	199,075	860,499	103,763	9,278	9,900	108,371 4/
Pioneer Power & Light Co.	1,102,744	911,866	55,559	25,748	35,894	73,677	17,155	1,403	0	18,280
Superior Water, Light & Power Co.	27,305,375	23,041,305	785,757	995,272	554,232	1,928,809	528,155	12,198	183	538,016
Westfield Milling & Electric Light Co.	498,733	429,393	22,455	7,607	6,232	33,046	7,346	590	0	7,648
Wisconsin Electric Power Co.	1,084,869,609	599,643,307	115,774,741	34,087,886	99,334,189	236,029,486	19,325,180	829,172	20,397,384	993,762 4/
Wisconsin Power and Light Co.	420,042,908	258,397,377	51,808,919	19,913,168	26,011,946	63,911,498	8,319,829	319,899	8,765,268	845,614 4/
Wisconsin Public Service Corp.	418,890,706	255,843,845	44,934,931	15,875,931	24,117,381	78,118,618	8,154,011	301,641	7,958,169	984,197 4/
Grand Total	$2,347,108,932	$1,409,765,097	$251,936,558	$ 86,379,275	$169,992,564	$429,035,438	44,039,777	1,774,478	40,056,441	8,860,481

1/ Data included in this table includes Wisconsin operations only, except where noted.
2/ Includes Interdepartmental Sales and Sales for Resale.
3/ Excluding Off-Peak Water Heating and Area Lighting Customers.
4/ Total company operations are represented in data on generation and purchases. Companies operating outside Wisconsin are: Northern States Power Co., Northwestern Wisconsin Electric Co., Wisconsin Electric Power Co., Wisconsin Power and Light Company and Wisconsin Public Service Corp. Where power is interchanged, the net figure is added to MWh purchased.

TABLE 11

CONDENSED SUMMARY OF 1987 OPERATIONS
INDIVIDUAL MUNICIPAL ELECTRIC UTILITIES 1/

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Net Operating Revenue	Total MWh Sold 2/	Average Number of Customers 3/	MWh Generated	MWh Purchased
Class A and B									
Cedarburg	$ 4,952,076	$ 4,342,840	$ 180,956	$ 157,120	$ 271,160	90,347	4,811	0	94,926
Jefferson	5,489,556	5,023,343	101,429	91,942	272,842	105,376	2,869	0	119,573
Kaukauna	16,938,222	14,767,054	706,635	686,963	777,570	486,012	9,209	96,428	403,599
Manitowoc	21,006,810	16,995,333	1,016,214	884,057	2,111,206	375,073	14,663	162,180	227,351
Marshfield	13,504,136	11,961,290	519,973	368,152	654,721	253,624	10,869	29,699	236,125
Menasha	7,081,249	5,903,695	550,364	425,138	202,052	129,548	6,469	39,155	92,232
New London	6,167,900	5,514,868	135,384	167,697	349,951	129,594	3,121	0	135,004
Oconomowoc	6,635,541	5,617,418	292,100	216,940	509,083	124,563	5,741	0	128,326
Plymouth	6,424,050	5,665,967	281,144	205,873	271,066	119,827	5,435	0	129,552
River Falls	3,838,690	3,223,940	250,859	188,695	175,196	72,731	3,592	3,207	72,096
Shawano	6,860,866	6,211,164	214,812	215,150	219,740	146,615	4,470	0	151,200
Sheboygan Falls	5,625,860	5,302,081	199,982	87,590	36,207	131,814	2,821	0	135,581
Stoughton	4,511,844	3,960,225	169,900	130,968	250,751	84,698	5,631	0	88,147
Sturgeon Bay	6,668,116	5,603,033	347,647	253,668	463,768	114,978	6,584	0	120,336
Sun Prairie	5,012,873	4,422,449	211,242	154,005	225,177	101,105	5,744	0	104,400
Two Rivers	3,969,133	3,696,040	144,753	115,995	12,345	72,297	5,675	0	77,091
Waterloo	2,174,593	1,951,457	62,739	47,009	113,388	44,595	1,337	0	46,510
Waupun	2,973,785	2,774,855	95,481	74,473	28,976	59,560	3,353	0	62,301
Wisconsin Rapids	10,148,842	8,804,849	405,166	390,655	548,172	180,516	10,716	0	188,160
Subtotal	$139,984,142	$121,741,901	$ 5,886,780	$ 4,862,090	$ 7,493,371	2,822,873	113,110	330,669	2,612,510
Class C									
Algoma	1,798,403	1,676,758	56,302	40,297	25,046	32,937	1,826	0	34,235
Arcadia	1,627,246	1,259,682	157,846	100,407	109,311	35,147	1,139	372	34,919
Argyle	248,497	202,327	17,198	10,105	18,867	6,099	442	118	6,227
Bangor	1,472,951	1,315,063	61,322	58,040	38,526	27,961	1,343	0	30,370
Barron	1,484,050	1,259,594	104,911	67,417	52,128	29,546	1,536	411	31,246
Belmont	311,382	269,424	14,665	7,499	19,794	5,522	417	0	5,695
Benton	285,834	237,480	19,558	18,034	10,762	4,244	443	0	4,415
Black Earth	671,932	541,911	43,472	31,330	55,219	10,303	867	0	11,063
Black River Falls	1,878,852	1,669,912	81,667	77,002	50,271	39,553	2,332	4,484	36,197
Bloomer	1,727,965	1,591,493	40,555	33,688	62,229	38,798	1,584	0	40,262

TABLE 11 (Continued)

CONDENSED SUMMARY OF 1987 OPERATIONS
INDIVIDUAL MUNICIPAL ELECTRIC UTILITIES 1/

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Net Operating Revenue	Total MWh Sold 2/	Average Number of Customers 3/	MWh Generated	MWh Purchased
Boscobel	$ 1,434,180	$ 1,211,867	$ 88,764	$ 66,198	$ 67,351	24,057	1,583	0	26,603
Brodhead	1,377,183	1,174,262	60,238	41,422	101,261	24,749	1,595	0	26,872
Cadott	512,097	446,959	26,136	13,667	25,335	9,332	631	0	10,104
Cashton	260,964	223,775	22,056	16,399	(1,266)	5,504	447	37	5,770
Centuria	232,042	220,018	6,644	5,317	63	4,129	383	0	4,297
Clintonville	2,911,080	2,526,623	99,457	83,837	201,163	48,118	2,406	0	50,918
Columbus	2,142,453	1,924,830	92,166	66,005	59,452	41,354	2,126	0	43,147
Cornell	608,486	538,601	25,620	23,625	20,640	11,340	808	0	12,049
Cuba City	667,510	596,549	41,830	21,703	7,428	12,020	887	0	12,993
Cumberland	1,635,489	1,213,230	183,284	132,431	106,544	27,313	1,172	244	28,836
Eagle River	1,260,551	1,100,633	50,051	36,950	72,917	21,715	1,086	0	22,598
Elkhorn	3,250,191	2,781,635	154,517	102,219	211,820	58,201	2,579	0	61,438
Elroy	563,455	503,001	51,848	29,309	(20,703)	12,990	783	(115)	14,073
Evansville	2,122,663	1,919,502	63,868	59,502	79,791	38,983	2,221	0	41,074
Fennimore	1,083,233	961,471	59,373	37,021	25,368	21,546	1,171	86	22,689
Florence	452,699	380,984	30,706	20,975	20,034	7,532	867	0	8,286
Gresham	511,017	405,404	48,678	35,533	21,402	8,843	886	3,452	6,142
Hartford	3,518,507	3,150,588	91,746	100,723	175,450	65,004	3,091	0	68,010
Hazel Green	334,725	314,866	14,598	8,914	(3,653)	5,921	522	0	6,514
Hustisford	820,673	689,282	56,523	39,965	34,903	13,748	1,072	0	14,611
Juneau	1,228,028	1,079,504	61,532	43,494	43,498	23,351	838	0	24,156
Kiel	2,159,245	1,961,506	72,406	48,378	76,955	42,647	1,675	0	45,744
LaFarge	282,261	235,608	15,281	11,901	19,471	4,695	518	0	4,616
Lake Mills	2,401,889	2,198,851	76,389	70,689	55,960	46,297	2,193	0	48,664
Lodi	858,757	757,830	49,154	32,119	19,654	14,144	1,045	0	15,632
Mazomanie	434,067	401,560	21,187	18,378	(7,058)	7,680	634	0	7,970
Medford	3,308,849	3,102,004	97,871	82,657	26,317	74,919	2,646	0	77,666
Mount Horeb	1,878,422	1,646,755	116,307	67,323	48,037	36,000	2,009	0	36,714
Muscoda	951,834	807,077	46,288	34,462	64,007	15,445	873	213	16,909
New Glarus	765,052	704,947	21,564	17,630	20,911	15,069	920	0	15,878

TABLE 11 (Concluded)

CONDENSED SUMMARY OF 1987 OPERATIONS
INDIVIDUAL MUNICIPAL ELECTRIC UTILITIES 1/

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Net Operating Revenue	Total MWh Sold 2/	Average Number of Customers 3/	MWh Generated	MWh Purchased
New Holstein	$ 2,881,697	$ 2,676,336	$ 98,529	$ 67,123	$ 39,709	52,989	2,023	0	55,332
New Lisbon	643,776	501,798	72,860	45,736	23,382	12,647	718	133	13,152
New Richmond	2,073,780	1,884,372	70,365	54,789	64,254	43,123	2,361	0	45,684
Oconto Falls	1,129,007	1,041,122	37,934	30,935	19,016	17,401	1,279	0	22,020
Pardeeville	737,329	694,904	30,372	19,835	(7,782)	14,266	933	217	14,899
Prairie du Sac	1,510,050	1,277,553	50,301	37,560	144,636	24,877	1,052	0	25,743
Princeton	593,817	516,518	31,654	17,853	27,792	9,830	811	0	10,195
Reedsburg	4,507,680	4,138,075	123,672	103,239	142,694	95,625	2,741	0	99,517
Rice Lake	4,742,161	4,282,846	215,023	168,989	75,303	99,234	4,166	0	104,414
Richland Center	3,750,384	3,505,599	201,727	161,130	(118,072)	66,397	2,750	16,773	52,007
Sauk City	1,328,732	1,176,495	49,386	33,641	69,210	22,853	1,387	0	25,483
Shullsburg	480,849	423,487	24,345	19,674	13,343	8,346	699	0	8,896
Slinger	771,120	687,946	28,244	18,410	36,520	14,297	823	0	15,367
Spooner	1,145,502	1,079,493	32,849	28,459	4,701	23,292	1,425	0	24,771
Stratford	514,483	474,853	14,614	8,531	16,485	8,513	673	0	9,211
Trempealeau	396,904	351,598	15,424	14,018	15,864	7,503	704	0	8,763
Viola	212,926	174,461	20,863	14,537	3,065	3,973	395	17	4,220
Waunakee	2,064,499	1,789,458	106,571	60,903	107,567	37,487	2,168	0	39,727
Westby	744,889	670,757	32,649	23,325	18,158	15,023	911	0	16,018
Whitehall	883,281	805,012	42,305	32,599	3,365	16,694	840	0	18,859
Wisconsin Dells	1,817,515	1,599,077	74,465	48,517	95,456	31,388	1,648	0	34,155
Wonewoc	295,081	298,486	9,808	4,860	(18,073)	5,762	445	0	6,152
Subtotal	$ 84,700,176	$ 75,253,612	$ 3,827,538	$ 2,827,228	$ 2,791,798	1,604,276	82,548	26,442	1,670,187
Class D - Merrillan	167,943	123,999	14,304	10,216	19,424	2,865	306	21	3,026
Grand Total	$ 224,852,261	$ 197,119,512	$ 9,728,622	$ 7,699,534	$10,304,593	4,430,014	195,964	357,132	4,285,723

1/ Data included in this table includes Wisconsin operations only, except where noted.

2/ Includes Interdepartmental Sales and Sales for Resale.

3/ Excluding Off-Peak Water Heating and Area Lighting Customers.

GAS UTILITY SUMMARY

Comparative statistics of the gas utility industry in Wisconsin for the three year period 1987-1985 are presented in this section. The following tables and charts deal with gas utility operations:

Table 12 - Comparative Statement of Revenues and Expenses, 1987 -1985.
Table 13 - Sales to Ultimate Consumers by Classes, 1987 -1985.
Table 14 - Operating and Plant Statistics, 1987 -1985
Table 15 - Condensed Summary of 1987 Operations - Individual Utilities

Chart 16 - Comparison of Revenues and Expenses, Wisconsin Gas Utilities, 1978 -1987.
Chart 17 - Residential Gas Spaceheating Customers Average Annual Use - 1978-1987.
Chart 18 - Residential Gas Spaceheating Customers Revenue per Therm - 1978-1987.
Chart 19 - Residential Gas Spaceheating Customers Average Annual Bill - 1978-1987.
Chart 20 - Revenue of Individual Gas Utilities, Percent of Total Sales to Ultimate Consumers, 1987.

Gas Utility Revenues and Expenses

Table 12 and Chart 16 show that gas utility revenues in 1987 were down about (17.78)% from the previous year. Expenses were down (18.60)% during the same period. Therms sold to ultimate consumers decreased (21.11)% and the number of ultimate (retail) consumers increased 2.06%.

Sales to Ultimate Consumers

Table 13 summarizes sales to ultimate consumers. Percentage changes in 1987 by principle classes of service are given below:

	% Change From 1986 to 1987		
	Revenues	Therms Sold	Number of Customers
Residential - General	(11.58)%	(9.49)%	(2.72)%
Residential - Space Heating	(9.71)	(6.80)	2.41
Commercial and Industrial - Firm	(33.99)	(31.88)	(2.48)
Commercial and Industrial - Interr.	(63.92)	(60.33)	(5.63)
Commercial and Industrial - Sp. Htg.	(13.27)	(8.81)	3.50
Total Sales to Ultimate Consumers	(20.97)%	(21.11)%	2.06 %

The number of residential space heating customers rose 2.41% during 1987. Since many of these customers formerly took service as residential general customers, a decline occurred in the number served in that classification. Commercial and industrial firm and interruptible customers decreased by (2.92)% while commercial and industrial space heating customers increased by 3.50%.

CHART 16

WISCONSIN GAS UTILITIES REVENUES AND EXPENSES

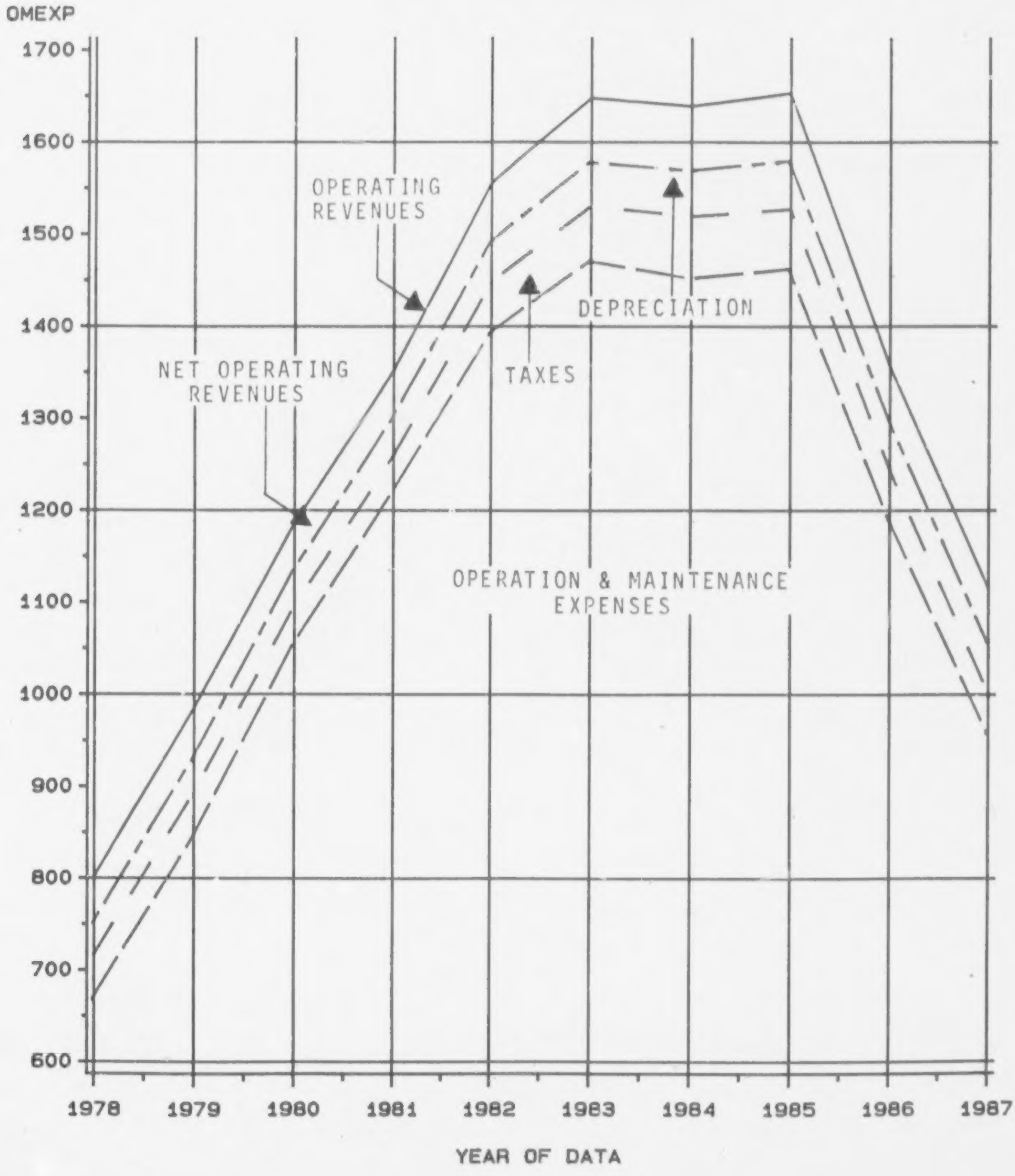


CHART 17

AVERAGE ANNUAL USE
RESIDENTIAL GAS SPACEHEATING CUSTOMERS

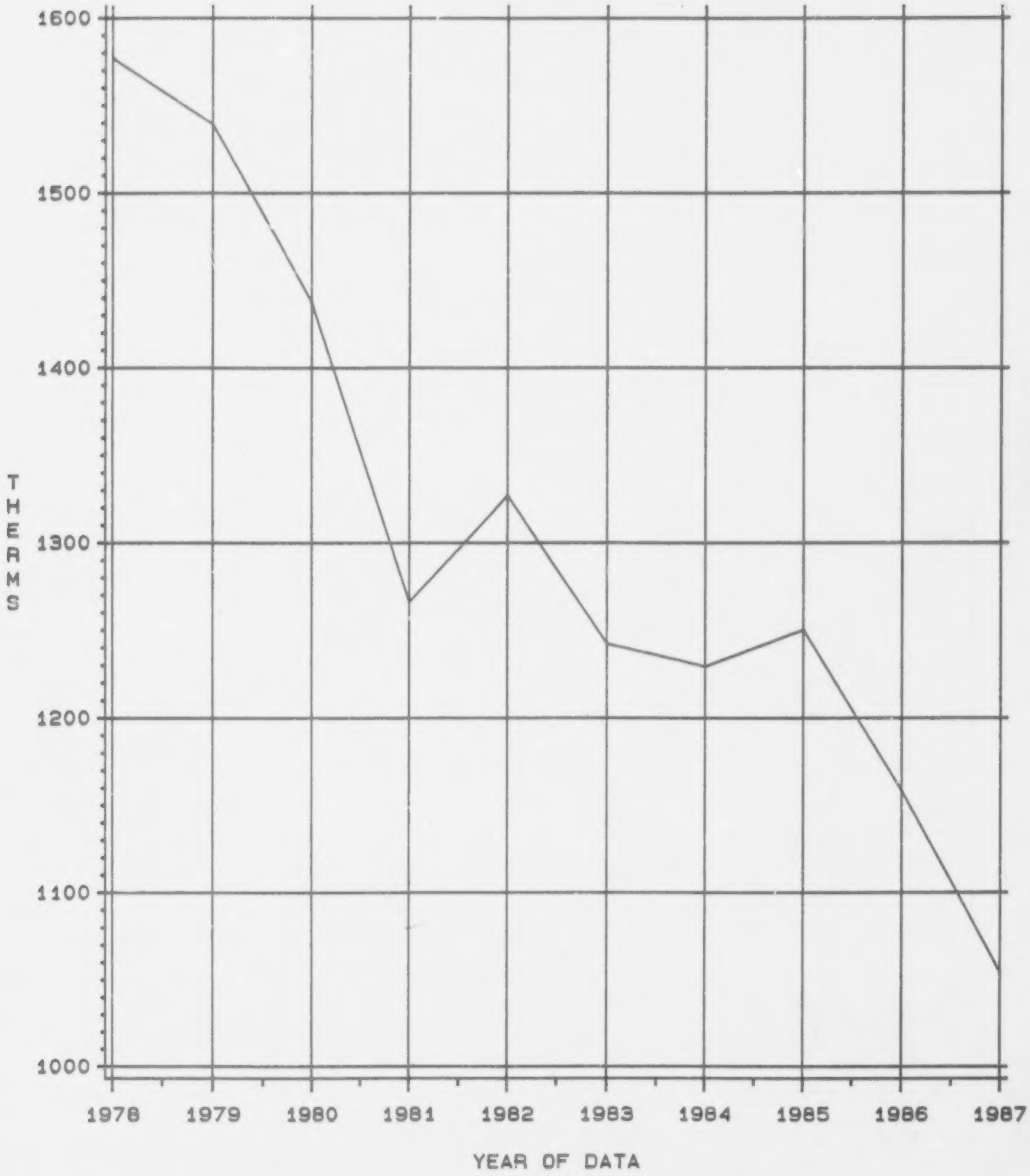


CHART 18

REVENUE PER THERM

RESIDENTIAL GAS SPACEHEATING CUSTOMERS

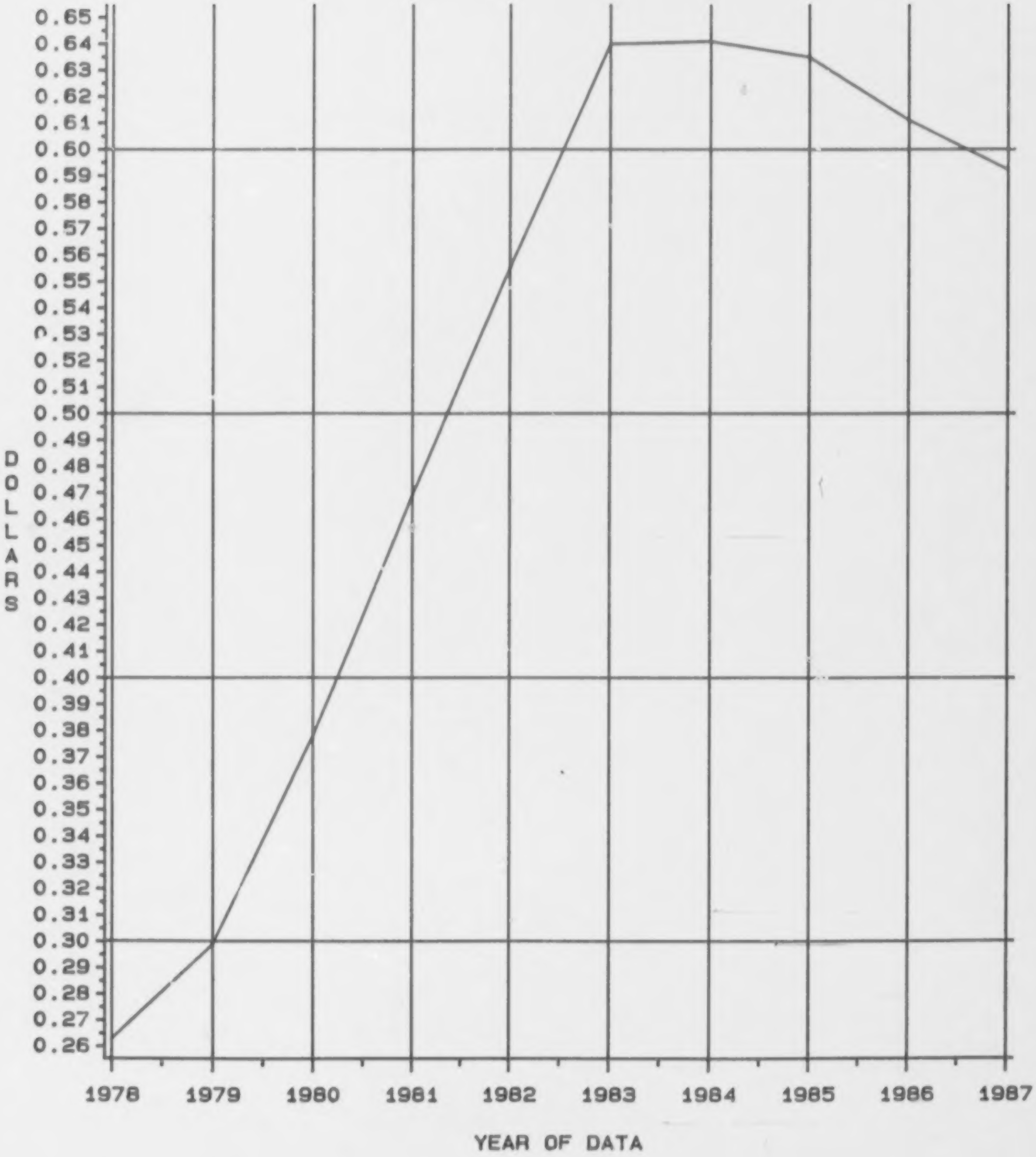


CHART 19

AVERAGE ANNUAL BILL

RESIDENTIAL GAS SPACEHEATING CUSTOMERS

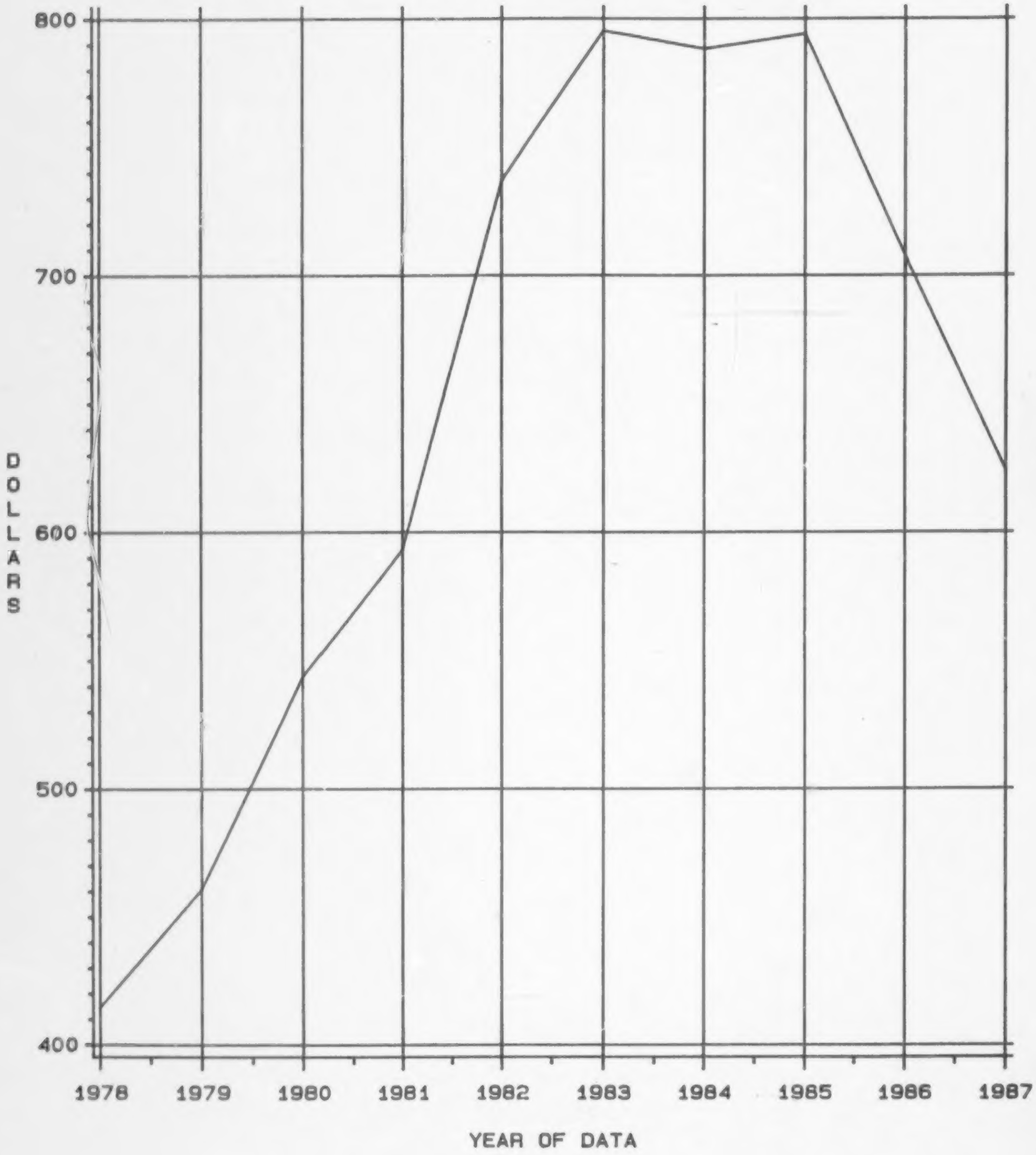


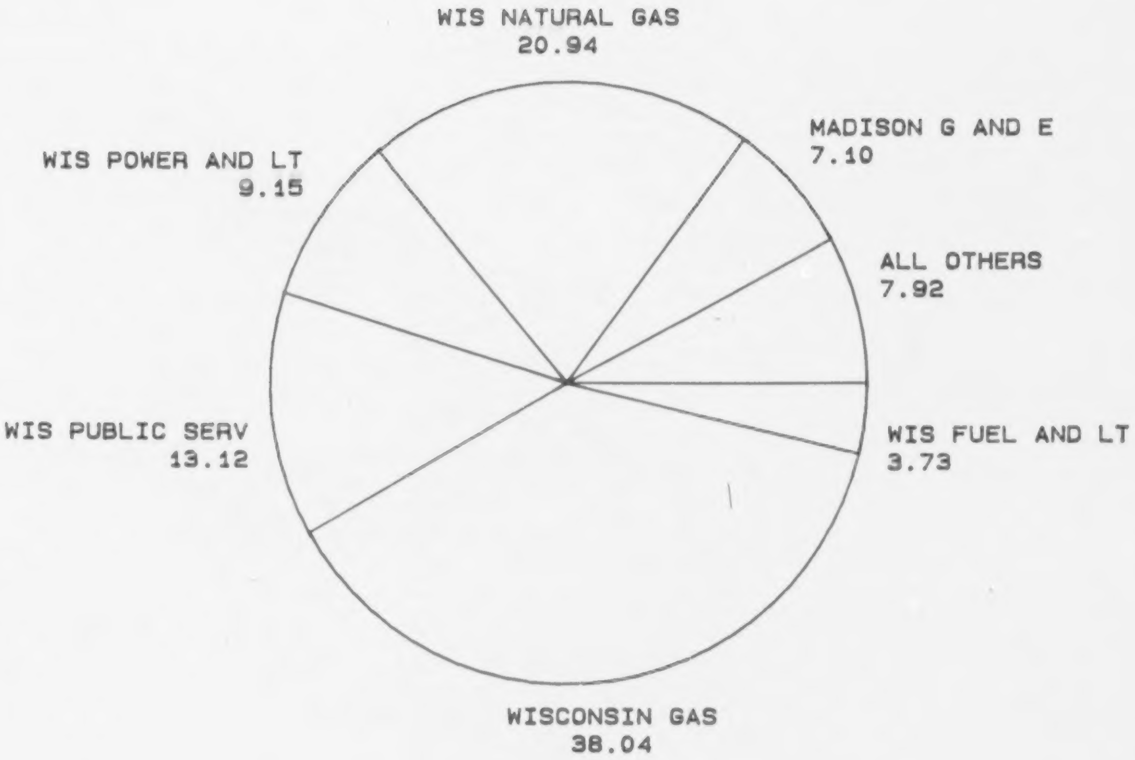
CHART 20

REVENUES OF WISCONSIN GAS UTILITIES

IN PERCENT OF TOTAL SALES TO ULTIMATE CONSUMERS

1987

SUM OF PERCENT BY UTILITY



Revenue and Consumption Ratios

The following table shows average revenue per therm, therms sold per customer and revenue per customer for each of the principle classes of service.

	1987	1986	1985
Revenue Per Therm (Cents)			
Residential - General	71.4	73.2	74.9
Residential - Space Heating	59.2	61.1	63.5
Commercial and Industrial - Firm	44.9	46.3	50.2
Commercial and Industrial - Interruptible	33.5	36.8	40.4
Commercial and Industrial - Space Heating	47.9	50.4	53.0
Therms Per Customer			
Residential - General	266	286	311
Residential - Space Heating	1,054	1,158	1,250
Commercial and Industrial - Firm	25,268	36,172	41,035
Commercial and Industrial - Interruptible	165,784	394,355	442,442
Commercial and Industrial - Space Heating	6,077	6,897	7,712
Revenue Per Customer			
Residential - General	$ 190	$ 209	$ 233
Residential - Space Heating	624	708	794
Commercial and Industrial - Firm	11,338	16,751	20,605
Commercial and Industrial - Interruptible	55,449	145,007	178,808
Commercial and Industrial - Space Heating	2,911	3,473	4,091

Revenue per therm decreased for all classifications in 1987. Therms sold per customer decreased for all consumer classifications. Revenue per customers decreased for all classes of service. Charts 17, 18 and 19 presents a comparison of average residential spaceheating bills and consumption over a 9-year period.

Gas Utility Plant Statistics

Table 14 supplies a summary of operating and plant statistics of the gas utility industry in Wisconsin. Over 99.9% of the 2,865 million therms delivered to mains in 1987 was natural gas. Almost 20,443 miles of main were in service at the close of 1987, exclusive of that owned by the pipeline companies. This presents a 2.00% increase over a year earlier.

Data on Individual Utilities

Individual company statistics for 1987 are presented in Table 15. Chart 20 shows a breakdown by company of total sales to ultimate consumers. The Wisconsin Gas Company accounted for 38% of total sales revenue from ultimate consumers and the five largest utilities made up 88% of the total.

TABLE 12

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN GAS UTILITIES 1/
1987-1985

	1987	1986	1985
Operating Revenues			
Sales to Ultimate Consumers	$ 1,058,990,881	$ 1,339,930,046	$ 1,634,437,090
Sales to Other Gas Utilities	0	0	0
Total Sales of Gas	$ 1,058,990,881	$ 1,339,930,046	$ 1,634,437,090
Other Operating Revenues	55,703,076	15,829,023	18,954,732
Total Operating Revenues	$ 1,114,693,957	$ 1,355,759,069	$ 1,653,391,832
Operating Expenses			
Production			
Other Gas Expenses	$ 221,322	$ 329,885	$ 339,471
Purchased Gas - Natural	752,633,393	981,166,767	1,259,750,111
Storage	805,158	706,193	697,278
Total Production Expense	$ 753,659,873	$ 982,202,845	$ 1,260,786,870
Transmission and Distribution	59,618,761	59,452,887	58,445,192
Customer Accounts	51,756,030	54,707,911	51,772,552
Customer Services	28,405,425	26,480,653	25,373,054
Sales Promotion	4,031,810	3,722,098	3,761,944
Administrative and General	60,798,867	63,971,410	62,916,519
Total Operation and Maint.	$ 958,270,766	$ 1,190,537,804	$ 1,463,056,131
Depreciation 2/	56,378,486	55,664,535	53,364,999
Taxes Other than Income Taxes	22,455,252	24,668,845	16,830,191
Income Taxes	20,040,811	27,807,934	47,200,476
Total Operating Expenses	$ 1,057,145,315	$ 1,298,679,118	$ 1,580,451,797
Net Operating Revenues	$ 57,548,642	$ 57,079,951	$ 72,940,035

1/ Excluding out-of-state operations except where noted.

2/ Including amortization of plant acquisition adjustments, conversion costs, and other utility plant not subject to charges for depreciation.

TABLE 13

SALES TO ULTIMATE CUSTOMERS BY CLASSES
WISCONSIN GAS UTILITIES 1/
1987-1985

	1987	1986	1985
Revenue from Gas Sold to Ultimate Consumers			
Residential - General	$ 15,787,296	$ 17,855,600	$ 21,084,868
Residential - Space Heating	603,701,083	668,594,469	730,859,120
Commercial and Industrial Firm	92,261,231	139,769,007	177,180,289
Commercial and Industrial Interruptible	70,586,042	195,614,830	344,563,344
Commercial and Industrial Space Heating	270,889,528	312,339,530	355,805,111
Interdepartmental	5,765,701	5,756,610	4,944,363
Total	$ 1,058,990,881	$ 1,339,930,046	$ 1,634,437,095
Therms of Gas Sold to Ultimate Consumers			
Residential - General 2/	22,092,079	24,407,578	28,137,189
Residential - Space Heating	1,020,022,501	1,094,464,962	1,150,580,797
Commercial and Industrial Firm	205,606,935	301,820,741	352,858,584
Commercial and Industrial Interruptible	211,042,900	531,985,466	852,585,986
Commercial and Industrial Space Heating	565,582,741	620,220,724	670,768,052
Interdepartmental	17,350,811	15,196,044	11,775,371
Total	2,041,697,967	2,588,095,515	3,066,705,979
Average Number of Customers			
Residential - General 2/	83,158	85,480	90,433
Residential - Space Heating	967,711	944,962	920,308
Commercial and Industrial Firm	8,137	8,344	8,599
Commercial and Industrial Interruptible	1,273	1,349	1,927
Commercial and Industrial Space Heating	93,070	89,921	86,978
Interdepartmental	7	8	8
Total	1,153,356	1,130,064	1,108,253

1/ Excluding out-of-state operations.

2/ The decline in Residential General consumption and customers is due to the transfer of Residential Customers to the Residential Space Heating classification when gas furnaces are installed.

TABLE 14

OPERATING AND PLANT STATISTICS
WISCONSIN GAS UTILITIES 1/
1987-1985

	1987	1986	1985
Disposition of Gas Delivered to Mains (Therms)			
Gas Sold in Wisconsin			
To Ultimate Consumers	2,041,697,967	2,574,971,561	3,066,705,979
To Other Gas Utilities	0	0	0
Total	2,041,697,967	2,574,971,561	3,066,705,979
Gas Used by Company	5,688,830	6,162,082	6,128,920
Transport Gas Out	743,164,622	272,749,189	0
Total Sold, Used and Transported Gas	2,790,551,419	2,853,882,832	3,072,834,899
Gas Unaccounted for	(36,973,573)	11,646,786	(28,986,508)
Gas Delivered to Mains	2,753,577,846	2,865,529,618	3,043,848,391
Percentage of Gas Unaccounted for	(1.34)%	0.41 %	(0.95)%
Gas Produced (Therms)			
Liquefied Petroleum Gas	8,400	10,753	13,441
Natural Gas Purchased (Therms)			
From ANR Company	1,600,901,407	2,244,982,830	2,658,421,453
From Natural Gas Pipe Line Co.	55,659,540	74,498,140	76,589,234
From Midwest Gas Transmission Company	8,779,900	11,556,798	12,011,024
From Northern Natural Gas Co.	213,832,919	250,831,139	293,916,305
Other Gas Pipelines	131,289,718	13,218,906	
Total Natural Gas Purchase	2,010,463,484	2,595,087,813	3,040,938,016
Total Gas Produced & Purch.	2,010,471,884	2,595,098,566	3,040,951,457
Net Inventory Change	2,062,083	(2,327,976)	2,896,934
Transport Gas In	741,043,879	272,759,028	0
Gas Delivered to Mains	2,753,577,846	2,865,529,618	3,043,848,391
Miles of Distribution and Transmission Mains 2/	20,443	20,042	19,898

1/ Excluding out-of-state operations.

2/ Not including transmission mains owned by pipeline companies.

TABLE 15

CONDENSED SUMMARY OF 1987 OPERATIONS
INDIVIDUAL GAS UTILITIES 1/

Utilities	Operating Revenue 2/	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Net Operating Revenues	Therms Sold 2/	Therms Produced	Therms Purchased 3/6/	Therms Produced & Purchased	Average Number of Customers 2/
Class A and B											
City Gas Co. of Antigo	$ 2,972,800	$ 2,557,092	$ 101,912	$ 78,231	$ 61,974	$ 173,591	4,951,226	0	4,783,798	4,783,798	3,498
Madison Gas & Elec. Co.	79,167,188	65,693,167	5,065,661	1,435,527	976,871	5,995,962	138,232,241	0	137,869,296	137,869,296	77,606
Midwest Natural Gas Co.	3,403,943	2,985,849	113,227	71,375	99,200	134,292	9,223,550	0	9,109,760	9,109,760	3,985
Northern States Power Co.	37,422,763	32,326,435	2,168,838	781,719	662,339	1,483,432	105,874,609	0	69,109,155	69,109,155	42,807
Superior Water, Light & Power Co.	7,505,016	6,752,631	388,058	183,338	(6,187)	187,176	16,708,117	4,930	16,817,280	16,822,210	8,777
Wisconsin Fuel & Light Co.	41,619,818	37,555,325	1,534,403	920,642	468,231	1,141,217	84,772,220	0	83,206,480	83,206,480	39,454
Wisconsin Gas Company	424,075,100	360,571,737	20,454,432	9,029,866	10,562,385	23,456,680	746,990,000	0	745,107,750	745,107,750	425,301
Wisconsin Natural Gas Company	233,380,153	200,248,527	12,809,949	4,197,441	3,050,848	13,073,388	416,107,697	0	415,192,870	415,192,870	237,666
Wisonsin Power & Light Co.	101,948,767	89,629,368	5,982,088	2,081,562	252,135	4,003,614	178,957,089	0	177,024,740	177,024,740	109,108
Wisconsin Public Service Corp.	146,262,867	128,883,299	5,927,693	2,826,213	2,758,940	5,866,722	263,310,295	0	275,977,448	275,977,448	159,323
Wisconsin Southern Gas Co.	32,263,944	26,725,860	1,649,072	761,171	1,114,385	2,013,456	64,154,761	3,470	63,923,787	63,927,257	40,122
Subtotal	$1,110,022,359	$ 953,929,290	$56,195,333	$22,367,085	$20,001,121	$57,529,530	2,029,281,805	8,400	1,998,122,364	1,998,130,764	1,147,647
Class C & D 5/											
Elroy Gas, Inc.	491,930	445,734	16,872	19,106	(261)	10,479	871,227	0	817,090	817,090	489
Muny Natural Gas Co. 4/	942,790	910,856	20,635	0	21,860	(10,561)	2,955,901	0	2,932,910	2,932,910	937
Natural Gas. Inc.	1,090,378	995,767	43,278	22,243	(357)	29,447	2,942,413	0	2,889,960	2,889,960	880
St. Croix Valley Natural Gas Co.	2,146,500	1,989,119	102,368	46,818	18,448	(10,253)	5,646,621	0	5,642,500	5,642,500	3,403
Subtotal	$ 4,671,598	$ 4,341,476	$ 183,153	$ 88,167	$ 39,690	$ 19,112	12,416,162	0	12,282,460	12,282,460	5,709
Total All Utilities	$1,114,693,957	$ 958,270,766	$56,378,486	$22,455,252	$20,040,811	$57,548,642	2,041,697,967	8,400	2,010,404,824	2,010,413,224	1,153,356

( ) Denotes Negative Figure.

1/ Data includes Wisconsin operations only.

2/ Includes Interdepartmental Sales and Sales for Resale.

3/ Out-of-state sales by Lake Superior District Power, Wisconsin Public Service Corporation and Wisconsin Power & Light Co. were subtracted from the therms purchased figure to give an estimated figure for Wisconsin only.

4/ Municipally owned.

5/ There are no Class D private gas utilities.

6/ Net Interchange and Net Transport Gas included.

TELEPHONE UTILITY SUMMARY

Comparative statistics of telephone utilities in Wisconsin during the period 1985 -1987 are presented in this session. In addition, selected data over a 10-year period are presented in Chart 21. The coverage is summarized below:

Table 16 - Comparative Statement of Revenues and Expenses, Wisconsin Telephone Utilities, 1987 -1985
Table 17 - Access Lines Served by Wisconsin Telephone Utilities, 1987-1985
Table 18 - Condensed Summary of 1987 Operations, Individual Telephone Utilities

Chart 21 - Comparison of Revenues and Expenses, Wisconsin Telephone Utilities, 1978 -1987

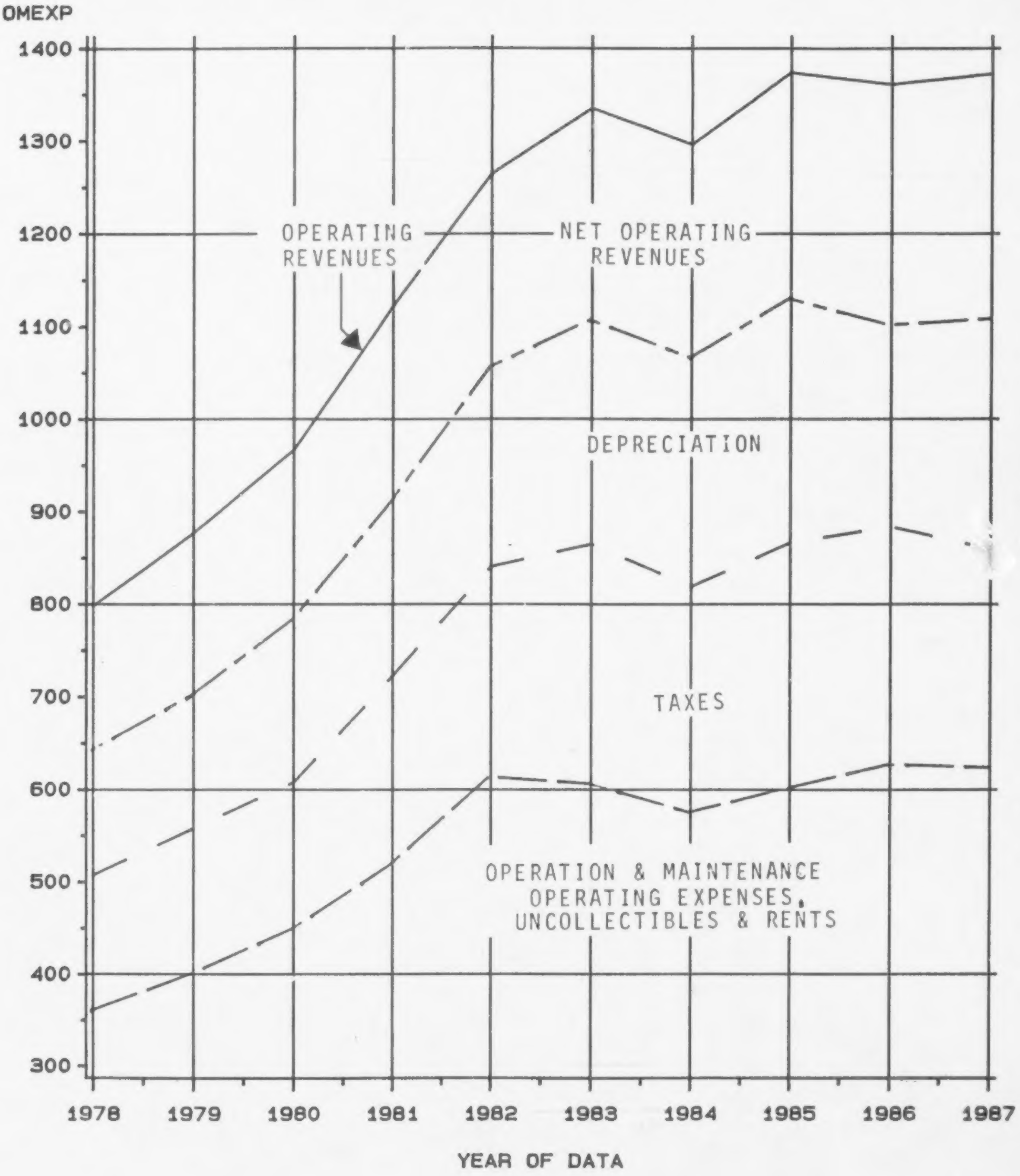
Telephone Utility Revenues and Expenses

Table 16 shows that telephone revenues in Wisconsin increased over $11.2 million in 1987, or 0.8%. Total operating expenses were up about $6.9 million, a 0.6% increase. Net operating revenue rose about $4.4 million or 1.7%.

Toll service revenues increased 5.6% during the year. Local service revenues also increased by 2.3%.

CHART 21

WISCONSIN TELEPHONE UTILITIES REVENUES AND EXPENSES



Access Line Data

Access Line data is presented in Table 17. About 2.3 million access lines were in service at the close of 1987. Approximately 77% are used by residential subscribers, 22% by business subscribers and 1% representing miscellaneous customers such as foreign exchange in and other common carrier connections.

Individual Companies

Table 18 presents individual company data for each of the 99 companies operating in the State. The Wisconsin Bell Company alone accounted for 68.9% of the revenues and served 66.7% of the customer access lines. General Telephone Company accounted for another 15.6% of the total revenues and served 15.0% of the access lines.

TABLE 16

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN TELEPHONE UTILITIES
1987-1985

	1987	1986	1985
Operating Revenues			
Exchange Service Revenue	$ 587,895,117	$ 574,947,490	$ 609,402,753
Access Revenues	441,032,379	445,252,064	416,049,202
Toll Service Revenue	215,349,920	203,880,795	210,937,686
Miscellaneous Operating Rev.	128,061,942	136,990,323	137,736,807
Total Operating Revenues	$ 1,372,339,358	$ 1,361,070,672	$ 1,374,126,448
Operating Expenses			
Maintenance Expense	$ 247,410,016	$ 248,402,090	$ 247,294,992
Traffic Expense	36,550,765	37,471,410	38,195,222
Commercial Expense 1/	118,784,709	115,873,147	109,154,640
General and Miscellaneous Exp.	205,747,994	211,648,730	194,148,593
General Services and Licenses	16,403,967	14,916,310	14,204,033
Access Expense	38,794	4/	4/
Total Operation and Maintenance	$ 624,936,245	$ 628,311,687	$ 602,997,480
Depreciation and Amortization	249,774,847	218,560,598	264,969,079
Taxes Other Than Income Taxes	0	0	0
Income Taxes 3/	234,531,608	255,478,208	263,285,178
Total Operating Expenses	$ 1,109,242,700	$ 1,102,350,493	$ 1,131,251,737
Net Operating Revenue	$ 263,096,658	$ 258,720,179	$ 242,874,711

1/ Contrary to normal procedure uncollectible revenues were included in the operating revenues and operation and maintenance expense data shown in this table. This was done to be consistent with the way it is handled for other types of utilities.

2/ Access Revenues were included in other revenues for 1984 and 1983.

3/ Taxes Other Than Income Taxes included.

4/ New account.

TABLE 17

CUSTOMER ACCESS LINES SERVED BY WISCONSIN TELEPHONE COMPANIES
1987-1985

	December 31, 1987	December 31, 1986	December 31, 1985
Residential	1,795,785	1,764,956	1,737,593
Business 1/	519,104	490,842	456,398
Miscellaneous 2/	31,805	29,974	34,706
Total Access Lines	2,346,694	2,285,772	2,228,697

1/ Includes pay and mobile lines.

2/ Includes foreign exchange in and other common carrier connections.

TABLE 18

A SUMMARY OF 1987 OPERATIONS

FOR INDIVIDUAL TELEPHONE UTILITIES

Utility	Operating Revenue 1/	Operation and Maintenance Expense 1/	Depreciation and Amortization Expense	Operating Taxes	Total Operating Expense	Net Operating Income	Access Lines End-of-Year
Amery Telephone Company	1571045.69	729066.35	438611.66	170362.38	1338040.39	233005.30	4591
Amherst Telephone Company	1572285.07	457009.00	349217.73	292222.45	1098449.18	473835.89	3368
Badger State Telephone Company, Inc.	1850219.08	865034.59	276998.00	314731.73	1456764.32	393454.79	3727
Baldwin Telecom, Inc.	1162612.00	521257.00	228398.00	157210.00	906865.00	255747.00	2724
Bayland Telephone Inc	562378.45	245205.28	119838.00	61283.66	426326.94	136051.51	1248
Belmont Telephone Company	297128.81	133387.64	54066.12	41426.44	228880.20	68248.61	685
Bergen Telephone Company	138534.87	83767.69	14415.10	18987.61	117170.40	21364.47	166
Black Earth Telephone Company	470626.93	284511.71	62419.73	63432.24	410363.68	60263.25	1052
Bloomer Telephone Company	898759.36	251012.21	213923.22	179166.30	644101.73	254657.63	2508
Bonduel Telephone Company	642884.07	343475.73	90978.23	111175.90	545629.91	97254.16	1431
Bruce Telephone Company, Inc	796424.21	320405.99	194829.24	70049.69	585284.92	211139.29	1272
Burlington Brighton & Wheatland Tel	1163918.37	657864.70	187237.94	148496.51	993599.15	170319.22	2617
Casco Telephone Company	506087.88	239620.53	110522.14	50594.82	400737.49	105350.39	987
Cencom of Wisconsin, Inc.	10806620.00	4716640.00	2358487.00	1487173.00	8562300.00	2244320.00	20529
Central State Telephone Company	3589683.99	1727659.42	608708.19	591066.61	2927434.22	662249.77	6829
Century Telephone of Wis., Inc.	26287383.30	12212671.00	4839125.05	4730065.24	21781861.29	4505522.01	43370
Chequamegon Telephone Coop Inc	2993852.03	1221971.75	1011918.89	238291.68	2472182.32	521669.71	5341
Chibardun Telephone Cooperative Inc	1876836.79	921603.82	469897.93	139517.46	1531019.21	345817.58	4319
Citizens Telephone Cooperative Inc	616830.04	237945.69	171475.92	43377.88	452799.49	164030.55	1601
Clear Lake Telephone Company, Inc	490690.63	273737.33	83710.24	45728.46	403176.03	87514.60	1161
Cochrane Cooperative Telephone Co	419824.00	180871.00	97217.00	28227.00	306315.00	113509.00	1004
Coon Valley Farmers Telephone Co	620152.88	258309.13	103315.48	119926.56	481551.17	138601.71	1837
Crandon Telephone Company	1238934.72	499607.87	336282.54	80698.11	916588.52	322346.20	2190
Cuba City Tel Exchange Co.	757264.38	336549.25	125335.00	133055.43	594939.68	162324.70	1412
Dickeyville Telephone Corporation	737733.15	410804.40	98325.23	77317.15	586446.78	151286.37	901
Dodge County Telephone Company	400574.38	236632.45	57931.34	56333.47	350897.26	49677.12	869
Fairwater Brandon Alto Telephone Co	592428.13	339829.63	116527.45	35907.92	492265.00	100163.13	1126
Farmers Independent Telephone Co	911563.60	382677.49	208847.96	142005.37	733530.82	178032.78	2158
Farmers Telephone Company	2334707.07	755935.72	398117.44	464529.18	1618582.34	716124.73	5165
Fennimore Telephone Company	659757.72	407880.34	84590.70	85779.34	578250.38	81507.34	1541
Footville Telephone Company	363945.13	198666.64	71009.60	21362.55	291038.79	72906.34	771
Forestville Telephone Company, Inc	672455.91	320579.94	96968.78	115331.16	532879.88	139576.03	1714
General Telephone Co of Wisconsin	214707957.00	97688040.00	47107582.00	27703819.00	172499441.00	42208516.00	353588
Greenwood Telephone Company	569529.84	332860.46	111652.69	74066.29	518579.44	50950.40	1285
Hager City Telephone Company	803730.00	454391.00	132320.00	78466.00	665177.00	138553.00	1633

TABLE 18

A SUMMARY OF 1987 OPERATIONS

FOR INDIVIDUAL TELEPHONE UTILITIES

Utility	Operating Revenue 1/	Operation and Maintenance Expense 1/	Depreciation and Amortization Expense	Operating Taxes	Total Operating Expense	Net Operating Income	Access Lines End-of-Year
Headwaters Telephone Company	2398147.08	559280.21	748456.90	331977.50	1639714.61	758432.47	3771
Hillsboro Telephone Company Inc	542667.69	278662.49	108308.06	41634.68	428605.23	114062.46	1384
Indianhead Telephone Co.	954817.27	325161.62	248992.72	130123.09	704277.43	250539.84	1568
La Valle Telephone Cooperative, Inc	599308.05	251407.39	198003.77	40654.91	490066.07	109241.98	1487
Lakefield Telephone Company	643728.26	220239.10	159847.64	86716.29	466803.03	176925.23	1233
Lakeshore Telephone Company	657297.83	419726.82	100566.00	59211.18	579504.00	77793.83	1515
Larsen-Readfield Telephone Company	626654.81	343996.69	132176.11	61312.54	537485.34	89169.47	1970
Lemonweir Valley Telephone Company	1253624.66	514217.26	236298.45	164595.24	915110.95	338513.71	2347
Luck Telephone Company	744548.00	325213.09	138612.99	124486.36	588312.44	156235.56	1777
Madeline Island Telephone Company	133222.71	101134.23	14254.79	10826.49	126215.51	7007.20	251
Manawa Telephone Company, Inc	950929.19	456199.16	199109.16	91670.94	746979.26	203949.93	1813
Maple Telephone Cooperative, Inc	121829.83	45269.77	13765.96	9758.02	68793.75	53036.08	290
Marquette Adams Telephone Coop Inc	1111176.14	462385.74	255659.35	70096.59	788141.68	323034.46	2450
Mid-Plains Telephone Incorporated	7838735.00	2585432.00	1228375.00	1761392.00	5575199.00	2263536.00	16090
Midway Telephone Company	2882299.29	1203901.15	490237.29	530042.48	2224180.92	658118.37	5983
Milltown Mutual Telephone Company	734923.13	351832.80	156361.67	92354.02	600548.49	134374.64	1843
Mondovi Telephone Company	1217693.71	596225.41	178680.12	179618.74	954524.27	263169.44	2115
Monroe County Telephone Company	3186754.23	1713491.06	552002.24	310366.64	2575859.94	610894.29	8285
Mosel Centerville Telephone Company	1433472.50	699818.05	269732.00	233939.64	1203489.69	229982.81	2779
Mosinee Telephone Company	1612018.56	633272.43	290899.34	316309.84	1240481.61	371536.95	3395
Mount Horeb Telephone Company	1566327.50	575226.91	321112.94	229176.39	1125516.24	440811.26	2779
Mount Vernon Telephone Company	2302582.47	1086956.32	311024.97	444263.77	1842245.06	460337.41	4904
Nelson Telephone Cooperative	1594107.29	698216.46	351226.20	130324.59	1179767.25	414340.04	3188
Niagara Telephone Company	1363582.61	714823.84	225892.91	159079.32	1099796.07	263786.54	3016
North-West Telephone Company	26451822.21	13308399.51	5144857.81	2463564.14	20916821.46	5535000.75	50930
Northeast Telephone Company	2037340.54	776269.29	460054.61	313387.71	1549711.61	487628.93	4399
Novys Telephone Company	208618.74	116128.31	22775.01	10051.68	148955.00	59663.74	509
Peoples Telephone Co (Mount Hope)	774014.75	405671.64	152529.00	99021.76	657222.40	116792.35	1605
Peoples Telephone Co. The (Randolph)	2945325.39	996944.50	686939.64	460292.83	2144176.97	801148.42	5257
Platteville Telephone Company	3991187.14	1634189.23	668429.56	665619.33	2968238.12	1022949.02	7357
Price County Telephone Company	1313635.54	618852.08	353736.52	112756.89	1085345.49	228290.06	3242
Rhinelander Telephone Company	4353364.39	1968460.03	775731.83	779930.82	3524122.68	829241.71	9994
Rib Lake Telephone Company	454334.07	231484.11	129325.66	44875.78	405685.55	48648.52	1036
Richland Grant Telephone Cooperative	979567.58	495513.00	250302.34	76014.90	821830.24	157737.34	2175
Rock River Telephone Company	701715.52	397456.25	116993.44	69864.87	584314.56	117400.96	1360

TABLE 18

A SUMMARY OF 1987 OPERATIONS

FOR INDIVIDUAL TELEPHONE UTILITIES

Utility	Operating Revenue 1/	Operation and Maintenance Expense 1/	Depreciation and Amortization Expense	Operating Taxes	Total Operating Expense	Net Operating Income	Access Lines End-of-Year
Scandinavia Telephone Company	1000495.40	465115.53	136435.39	189186.88	790737.80	209757.60	1857
Sharon Telephone Company	530660.22	334904.69	47128.09	73469.81	455502.59	75157.63	929
Shell Lake Telephone Company	618416.80	313014.95	147533.26	62196.37	522744.58	95672.22	1805
Siren Telephone Company Incorporated	628595.40	275465.01	127257.89	90339.61	493062.51	135532.89	1729
Solon Springs Telephone Company	5646284.35	2482365.57	1019253.60	923257.11	4424876.28	1221408.07	13393
Somerset Telephone Company, Inc	569539.89	231197.84	100234.04	83981.97	415413.85	154126.04	1201
Southeast Telephone Co of Wisc, Inc	2360060.91	1043059.65	352563.66	345056.11	1740679.42	619381.49	5303
Spring Valley Telephone Company, Inc	364493.21	218305.96	81985.11	21592.88	321884.95	42608.26	808
St Croix Telephone Company	2470042.00	726822.00	540803.00	492391.00	1760016.00	710026.00	4983
State Long Distance Telephone Co	3205690.45	1388737.89	512956.29	589075.29	2490769.47	714920.98	5644
Stockbridge & Sherwood Telephone Co	1193588.80	592794.82	220549.00	194592.73	1007936.55	185652.25	2181
Sullivan Telephone Company	700198.56	239158.74	117354.32	148606.22	505149.28	195049.28	1549
Tenney Telephone Company	352193.73	261078.84	43949.83	33971.53	339000.20	13193.53	860
Thorp Telephone Company	877735.47	511767.40	125478.91	104412.87	741659.18	136076.29	1858
Tri-County Telephone Coop, Inc	1593418.99	717780.16	309047.69	118117.66	1144945.51	448473.48	3242
Turtle Lake Telephone Company Inc	438931.26	251891.05	74579.47	32968.06	359438.58	79492.68	1121
Union Telephone Company	1872607.48	608299.09	327930.35	335585.71	1271815.15	600792.33	3139
United Telequipment Corporation	5986690.00	2683855.00	634309.00	678572.00	3996736.00	1989954.00	12575
Universal Tel Co of Northern Wis Inc	4672072.28	2056599.15	764993.44	797063.68	3618656.27	1053416.01	10582
Urban Telephone Corporation	7003399.76	2989460.20	1093579.64	1162506.09	5245545.93	1757853.83	16479
Valders Telephone Company	896640.87	479595.22	131720.00	161155.45	772470.67	124170.20	1770
Vernon Telephone Cooperative	2289381.58	884382.70	468944.28	158814.27	1512141.25	777240.33	5205
Viroqua Telephone Company	1765449.01	945189.34	283573.09	297655.04	1526417.47	239031.54	2952
Waunakee Telephone Company Inc	1626233.20	719523.27	282710.11	300297.15	1302530.53	323702.67	3410
Wayside Telephone Company	541056.00	274455.00	102881.00	57494.00	434830.00	106226.00	1177
West Wisconsin Telephone Coop, Inc	2348552.15	736240.23	515678.36	173054.03	1424972.62	923579.53	3607
Wisconsin Bell, Inc.	945806505.00	432657092.00	162766103.00	176201195.00	771624390.00	174182115.00	1564912
Wittenberg Telephone Company	904769.93	371401.55	176018.60	129245.26	676665.41	228104.52	1699
Wood County Telephone Company	9308922.00	4117720.00	1547223.00	1699258.00	7364201.00	1944721.00	19907
Total	1372339357.89	624936244.60	249774846.96	234531608.34	1109242699.90	263096657.99	2346694

1/ Contrary to normal procedure uncollectible revenues were included in the operating revenues and operation and maintenance expense data shown in this table. This was done to be consistent with the way it is handled for other types of utilities.

WATER UTILITIES

Comparative statistics of water utilities operating in Wisconsin during the period from 1985 through 1987 are presented in this section. Chart 22 shows a summary of the income account over a ten-year period. The coverage is summarized below:

Table 19 - Comparative Statement of Revenue and Expenses Wisconsin Water Utilities, 1987 - 1985.
Table 20 - Operating and Plant Statistics, Wisconsin Water Utilities, 1987 -1985.
Table 21 - Condensed summary of 1987 Operations, Individual Water Utilities

Chart 22 - Comparison of Revenues and Expenses, Wisconsin Water Utilities, 1978-1987.

Water Utility Revenues and Expenses

Chart 22 shows that revenues and expenses advanced steadily over the past nine years. Taxes are up 96.7% for the period while operation and maintenance expenses are up 81.3%, depreciation rose 65.9%, operating revenues rose 92.7% and net operating revenue increased 167.4%.

Revenues increased 6.4% and operating expenses were up 3.1% during 1987. Net operating revenue increased 24.6%.

Operating and Plant Statistics

The total number of water customers served increased 1.4% in 1987. Gallons of water pumped was up 2.3%. Electric pumpage accounted for 100.0% of the total. Total miles of main increased 1.5%.

Data on Individual Utilities

Table 21 shows selected data on each Class A and B water utility, all but two of which are municipally owned. The table also shows totals for the smaller utilities. Municipal utilities accounted for 96.3% of the total operating revenue and served 97.6% of the customers. Superior, served by Superior Water, Light, and Power Company, and Beloit and Ripon served by Wisconsin Power and Light Company, were the largest cities served by private utilities.

CHART 22

WISCONSIN WATER UTILITIES REVENUES AND EXPENSES

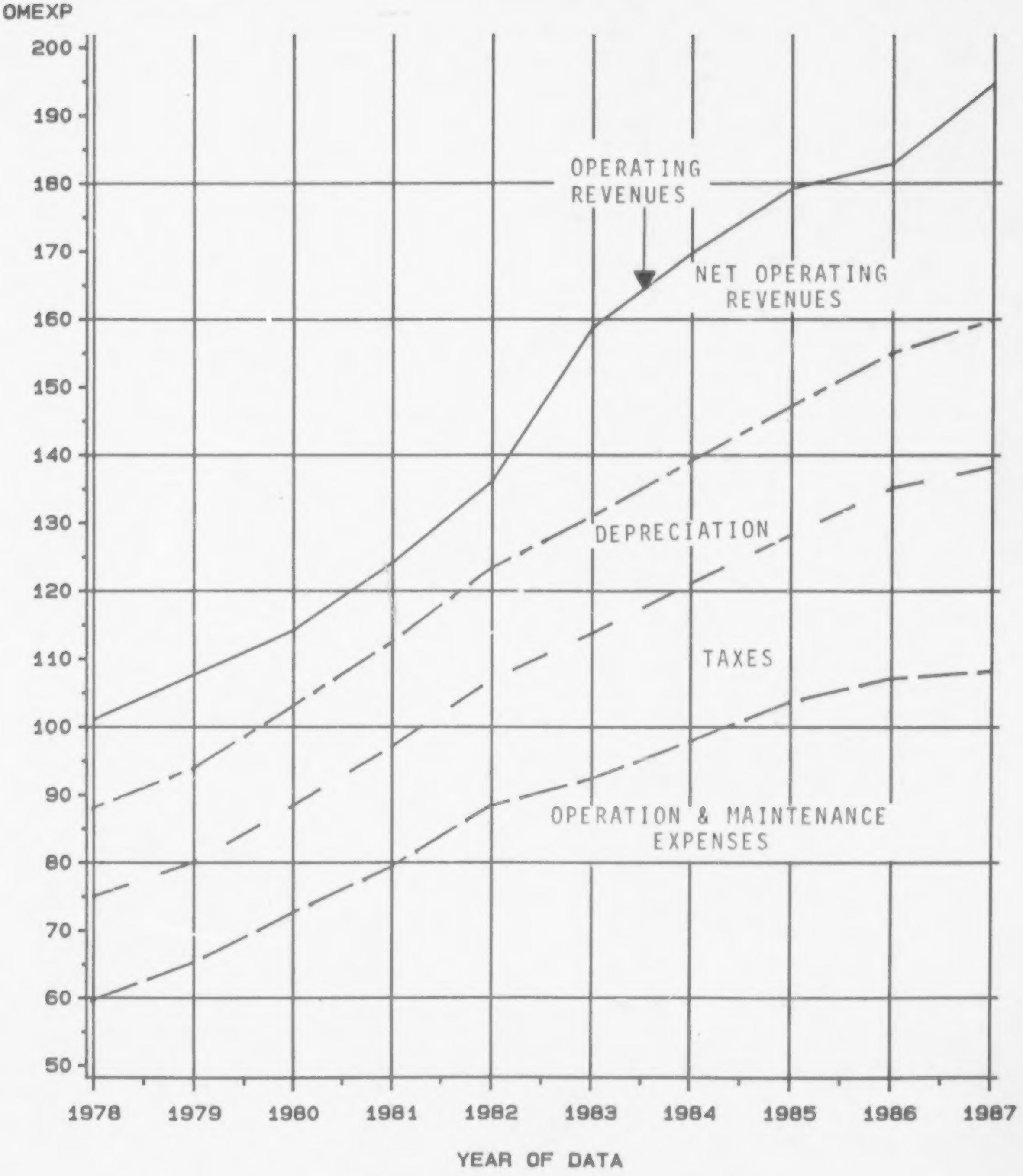


TABLE 19

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN WATER UTILITIES
1987-1985

	1987	1986	1985
All Water Utilities			
Operating Revenues			
Sales to General Consumers	$ 143,799,310	$ 134,477,498	$ 132,448,558
Interdepartmental Sales	151,195	132,906	128,218
Sales to Other Water Utilities	4,906,039	4,698,036	4,684,670
Fire Protection and Other Municipal Sales	42,188,287	39,923,610	38,669,886
Total Sales of Water	$ 191,044,831	$ 179,232,050	$ 175,931,332
Miscellaneous Operating Revenue	3,592,439	3,709,867	3,311,272
Total Operating Revenues	$ 194,637,270	$ 182,941,917	$ 179,242,604
Operating Expenses			
Source of Water Supply (Excluding Purchases)	$ 1,731,457	$ 1,664,306	$ 2,133,479
Water Purchases	5,916,111	5,835,915	4,891,064
Pumping Expenses	25,803,950	26,134,808	25,449,623
Purification	14,457,813	13,945,457	13,780,076
Total Production Expense	$ 47,909,331	$ 47,580,486	$ 46,254,242
Transmission and Distribution	27,386,324	27,785,388	27,947,303
Customer Accounts	7,263,684	7,226,240	7,053,860
Sales	2,290	21,121	2,234
Administrative and General Expenses	25,815,596	24,672,531	22,543,040
Total Operation and Maintenance Expense	$ 108,377,225	$ 107,285,766	$ 103,800,679
Depreciation and Amortization	21,684,370	19,932,315	18,948,679
Taxes Other Than Income Taxes	29,659,995	27,491,522	23,845,664
Income Taxes	256,283	413,115	632,060
Total Operating Expenses	$ 159,977,873	$ 155,122,718	$ 147,227,082
Net Operating Revenues	$ 34,659,397	$ 27,819,199	$ 32,015,522

TABLE 19 (Concluded)

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN WATER UTILITIES
1987-1985

	1987	1986	1985
Private Water Utilities			
Total Operating Revenues	$ 7,221,516	$ 6,525,523	$ 6,603,928
Operation and Maintenance	3,501,077	3,644,593	3,698,804
Depreciation and Amortization	723,557	703,452	662,635
Taxes Other Than Income Taxes	396,904	406,943	298,463
Income Taxes	256,283	413,115	632,060
Total Operating Expenses	$ 4,877,821	$ 5,168,103	$ 5,291,962
Net Operating Revenues	$ 2,343,695	$ 1,357,420	$ 1,311,966
Municipal Utilities			
Total Operating Revenues	$187,415,754	$176,416,394	$172,638,676
Operation and Maintenance	104,876,148	103,641,173	100,101,875
Depreciation and Amortization	20,960,813	19,228,863	18,286,044
Taxes Other Than Income Taxes	29,263,091	27,084,579	23,547,201
Total Operating Expenses	$155,100,052	$149,954,615	$141,935,120
Net Operating Revenues	$ 34,659,397	$ 26,461,779	$ 30,703,556

TABLE 20

OPERATING AND PLANT STATISTICS
WISCONSIN WATER UTILITIES
1987-1985

	1987	1986	1985
Average Number of Customers			
Residential	885,277	873,861	864,15
Commercial	96,674	95,686	93,464
Industrial	8,781	7,597	7,825
Total	990,732	977,144	965,442
Private Utilities	24,476	26,955	26,941
Municipal Utilities	966,256	950,189	938,501
Total	990,732	977,144	965,442
Gallons of Water Pumped Into Distribution System (000 Omitted)			
Electric	195,459,755	189,109,940	184,658,073
Internal Combustion	0	0	20,948
Steam	0	0	0
Purchased	11,325,353	13,108,519	13,490,825
Total	206,785,108	202,218,459	198,169,846
Private Utilities	4,335,108	4,308,307	4,391,391
Municipal Utilities	202,450,000	197,910,152	193,778,455
Total	206,785,108	202,218,459	198,169,846
Miles of Distribution Main on December 31			
Private Utilities	362	362	363
Municipal Utilities	14,092	13,874	13,821
Total	14,454	14,236	14,184

TABLE 21

CONDENSED SUMMARY OF 1987 OPERATIONS
INDIVIDUAL WATER UTILITIES

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Total Operating Expenses	Net Operating Revenues	Average Number of Customers 1/
Private Utilities Class A & B								
Superior Water, Light & Power Co. (SWLP)	$ 3,067,389	$ 1,459,294	$ 165,829	$ 180,753	$ 245,810	$ 2,051,686	$ 1,015,703	9,385
Wisconsin Power & Light Co. (WPL)	3,888,152	1,864,914	520,813	202,642	6,269	2,594,638	1,293,514	13,494
Subtotal	$ 6,955,541	$ 3,324,208	$ 686,642	$ 383,395	$ 252,079	$ 4,646,324	$ 2,309,217	22,879
11 Class D Water Utilities 2/	265,975	176,869	36,915	13,509	4,204	231,497	34,478	1,769
Total Private Utls.	$ 7,221,516	$ 3,501,077	$ 723,557	$ 396,904	$ 256,283	$ 4,877,821	$ 2,343,695	24,648
Municipal Utilities Class A								
Appleton	$ 4,031,015	$ 2,239,161	$ 421,117	$ 518,861	$ 0	$ 3,179,139	$ 851,876	21,329
Cudahy	1,399,642	705,690	129,045	199,622	0	1,034,357	365,285	5,202
Eau Claire	3,357,608	1,610,460	324,564	559,503	0	2,494,527	863,081	18,800
Fond du Lac	1,677,613	1,067,070	188,328	212,429	0	1,467,827	209,786	12,707
Glendale	1,034,071	690,832	117,972	126,342	0	935,146	98,925	4,502
Green Bay	5,442,000	2,336,074	639,293	674,171	0	3,649,538	1,792,462	33,255
Janesville	1,816,395	983,200	190,057	327,587	0	1,500,844	315,551	17,649
Kaukauna	667,636	434,681	71,177	105,227	0	611,085	56,551	3,965
Kenosha	4,562,839	2,328,493	428,471	637,598	0	3,394,562	1,168,277	23,391
La Crosse	2,310,011	1,337,207	188,265	414,772	0	1,940,244	369,767	15,296
Madison	7,728,865	4,635,587	821,427	1,299,546	0	6,756,560	972,305	48,739
Manitowoc	2,413,774	1,317,933	216,061	307,636	0	1,841,630	572,144	11,443
Marinette	1,042,890	669,891	94,587	152,970	0	917,448	125,442	4,704
Marshfield	759,724	562,646	62,661	98,703	0	724,010	35,714	6,483
Milwaukee	36,456,672	22,086,052	3,461,203	5,315,656	0	30,862,911	5,593,761	162,981
Neenah	1,426,420	944,743	135,373	206,144	0	1,286,260	140,160	8,616
Oshkosh	2,904,758	1,652,655	274,639	394,957	0	2,322,251	582,507	18,108
Racine	5,824,944	3,182,609	437,049	656,996	0	4,276,654	1,548,290	28,449
Sheboygan	2,283,130	1,381,789	140,480	331,847	0	1,854,116	429,014	17,060
South Milwaukee	952,613	647,820	69,033	135,753	0	852,606	100,007	5,928
Waukesha	3,586,731	2,074,949	389,913	535,410	0	3,000,272	586,459	13,759
Wausau	2,236,841	1,231,879	186,908	316,749	0	1,735,536	501,305	12,393
Wauwatosa	3,133,081	2,228,024	191,141	407,115	0	2,826,280	306,801	15,640
West Allis	2,991,982	2,240,696	223,580	451,601	0	2,915,877	76,105	18,975
Wisconsin Rapids	1,530,289	996,645	123,406	288,225	0	1,408,276	122,013	6,984
Subtotal	$ 101,571,544	$ 59,586,786	$ 9,525,750	$ 14,675,420	$ 0	$ 83,787,956	$ 17,783,588	536,358

TABLE 21 (Concluded)

CONDENSED SUMMARY OF 1987 OPERATIONS
INDIVIDUAL WATER UTILITIES

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Total Operating Expenses	Net Operating Revenues	Average Number of Customers 1/
Municipal Utilities (Continued)								
Class B								
Allouez	$ 796,705	$ 481,584	$ 71,611	$ 82,374	$ 0	$ 635,569	$ 161,136	4,799
Ashland	575,593	421,099	36,674	90,590	0	548,363	27,230	2,927
Beaver Dam	713,379	518,497	61,983	99,823	0	680,303	33,076	5,384
Brown Deer	730,797	490,577	76,030	119,224	0	685,831	44,966	3,411
Cedarburg	471,592	261,670	77,624	91,520	0	430,814	40,778	2,894
Chippewa Falls	1,038,294	576,225	102,652	177,312	0	856,189	182,105	4,635
De Pere	738,446	398,027	97,320	176,015	0	671,362	67,084	5,327
Greendale	706,333	551,586	63,830	120,117	0	735,533	(29,200)	4,595
Jefferson	371,234	179,667	33,048	53,268		265,983	105,251	1,990
Menasha, Twn. S.D. 4	1,071,328	601,262	155,582	13,131	0	769,975	301,353	4,464
Menasha, City	1,930,260	1,187,646	120,451	164,875	0	1,472,972	457,288	4,967
Menomonee Falls	1,378,254	528,580	159,849	291,973	0	980,402	397,852	5,462
New Berlin	1,784,445	704,543	276,811	469,428	0	1,450,782	333,663	6,745
New London	433,644	187,444	33,797	55,697	0	276,938	156,706	2,408
Oak Creek	2,410,456	893,529	378,378	613,621	0	1,885,528	524,928	4,038
Oconomowoc	724,717	379,964	89,473	104,746	0	574,183	150,534	3,376
Platteville	539,041	339,817	73,805	107,411	0	521,033	18,008	2,688
Plymouth	536,554	378,859	33,840	65,693	0	478,392	58,162	2,310
Port Washington	1,161,706	566,874	99,256	181,089	0	847,219	314,487	3,018
Rib Mountain	429,183	159,135	136,182	3,601	0	298,918	130,265	1,264
River Falls	305,875	218,168	31,415	56,408	0	305,991	(116)	2,478
Shawano	502,701	164,835	49,326	64,905	0	279,066	223,635	3,041
Sheboygan Falls	712,113	444,896	55,851	60,218		560,965	151,148	2,091
Shorewood	509,628	478,936	16,980	39,675	0	535,591	(25,963)	3,557
Stevens Point	827,662	457,106	80,488	179,161	0	716,755	110,907	6,412
Sturgeon Bay	944,977	338,843	110,287	173,624	0	622,754	322,223	3,648
Sun Prairie	528,581	324,626	53,861	98,865	0	477,352	51,229	4,469
Tomahawk	292,442	147,617	34,493	56,002	0	238,112	54,330	1,265
Two Rivers	733,932	444,415	65,097	99,621	0	609,133	124,799	4,676
Waterloo	124,468	62,841	10,442	18,116	0	91,399	33,069	855
Watertown	933,313	451,540	103,706	146,320	0	701,566	231,747	5,940
Waupaca	502,490	196,317	51,851	68,524	0	316,692	185,798	2,046
Waupun	710,123	368,000	38,268	62,296	0	468,564	241,559	2,847
West Bend	1,283,254	634,211	147,196	214,289	0	995,696	287,558	6,890
Whitefish Bay	601,374	354,499	66,741	51,436	0	472,676	128,698	4,793
Subtotal	$ 28,054,894	$ 14,893,435	$ 3,094,198	$ 4,470,968	$ 0	$ 22,458,601	$ 5,596,293	131,710
Class C Uilities	37,354,628	19,051,222	4,875,388	6,124,405	0	30,051,015	7,303,613	193,358
Class D Utilities	20,972,676	10,986,234	3,417,620	3,896,251	0	18,300,105	2,672,571	120,159
Total Municipal Utls.	$187,953,742	$104,517,677	$ 20,912,956	$ 29,167,044	$ 0	$154,597,677	$ 33,356,065	981,585
Total All Utilities	$195,175,258	$108,018,754	$ 21,636,513	$ 29,563,948	$ 256,283	$159,475,498	$ 35,699,760	1,006,233

1/ Includes fire protection, public authorities, interpartmental and other water utility retail customers.
2/ There were no private Class C utilities in 1987.
3/ () Denotes negative figure.

STEAM AND HOT WATER HEATING UTILITY SUMMARY

As shown in Table 22, steam and hot water heating utility operations in Wisconsin are not very extensive. Only two utilities rendered this service in 1987.

The Wisconsin Electric Power Company, operating in the city of Milwaukee, has by far the largest heating utility in the State, serving 512 customers at the close of 1987. Its net operating revenue for the year was $821,781.

The other community in which heating service was supplied during the year was Waterloo, served by a municipal utility. Waterloo had a loss of $(4,703) for 1987.

TABLE 22

COMPARATIVE STATEMENT OF REVENUES, EXPENSES AND STATISTICS FOR WISCONSIN STEAM AND HOT WATER HEATING UTILITIES
1986-1984

	1987	1986	1985
Operating Revenues	$ 10,565,921	$ 11,966,842	$ 12,142,297
Operation and Maintenance	8,022,988	8,789,258	9,046,722
Depreciation	1,140,693	897,038	770,925
Taxes	585,162	1,020,574	1,013,093
Total Operating Expenses	$ 9,748,843	$ 10,706,870	$ 10,830,740
Net Operating Revenues	$ 817,078	$ 1,259,972	$ 1,311,557
Number of Customers	571	578	587

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STATISTICS OF WISCONSIN PUBLIC UTILITIES

1988-1987-1986

ELECTRIC, GAS, TELEPHONE
WATER AND HEATING UTILITIES

PUBLIC SERVICE COMMISSION OF WISCONSIN
Accounts and Finance Division

Bulletin No. 8

December, 1989

STATISTICS OF WISCONSIN PUBLIC UTILITIES

1988-1987-1986

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STATISTICS OF WISCONSIN PUBLIC UTILITIES

This bulletin presents a statistical summary of public utilities operating in Wisconsin during the period 1988-1986 inclusive. In addition, selected data over longer periods are shown in the text or portrayed in the charts. Some Wisconsin utilities have operations outside the State. These operations are generally excluded from the summaries but this was not possible in the case of financial data shown in Tables 1, 2, and 3.

The following table gives an indication of the relative importance of various utility services included in the report.

Year Ending December 31, 1988

	Average Number of Customers*#	Operating Revenues*	Net Operating Revenues*
Electric	1,997,498	$2,698,077,306	$387,782,123
Gas	1,177,871	1,242,631,354	83,274,222
Telephone	2,372,403	1,407,135,784	263,165,385
Water	1,021,956	217,972,750	41,617,625
Heating	552	12,432,522	1 481,620
		$5,578,249,716	$777,320,970

* Excludes out-of-state operations.
# Ultimate consumers.

Chart 1 presents a comparison of trends in gross operating revenue since 1979. Gas utility revenues increased by 26% in 9 years. Electric and telephone revenues increased 72% and 60% respectively while water revenues rose 102% during the 9-year period.

Chart 2 shows that since 1979, net operating telephone revenues have risen 45%, electric revenues 65% , water revenues 204% and gas revenues 54%.

CHART 1

COMPARATIVE TRENDS OF OPERATING REVENUES

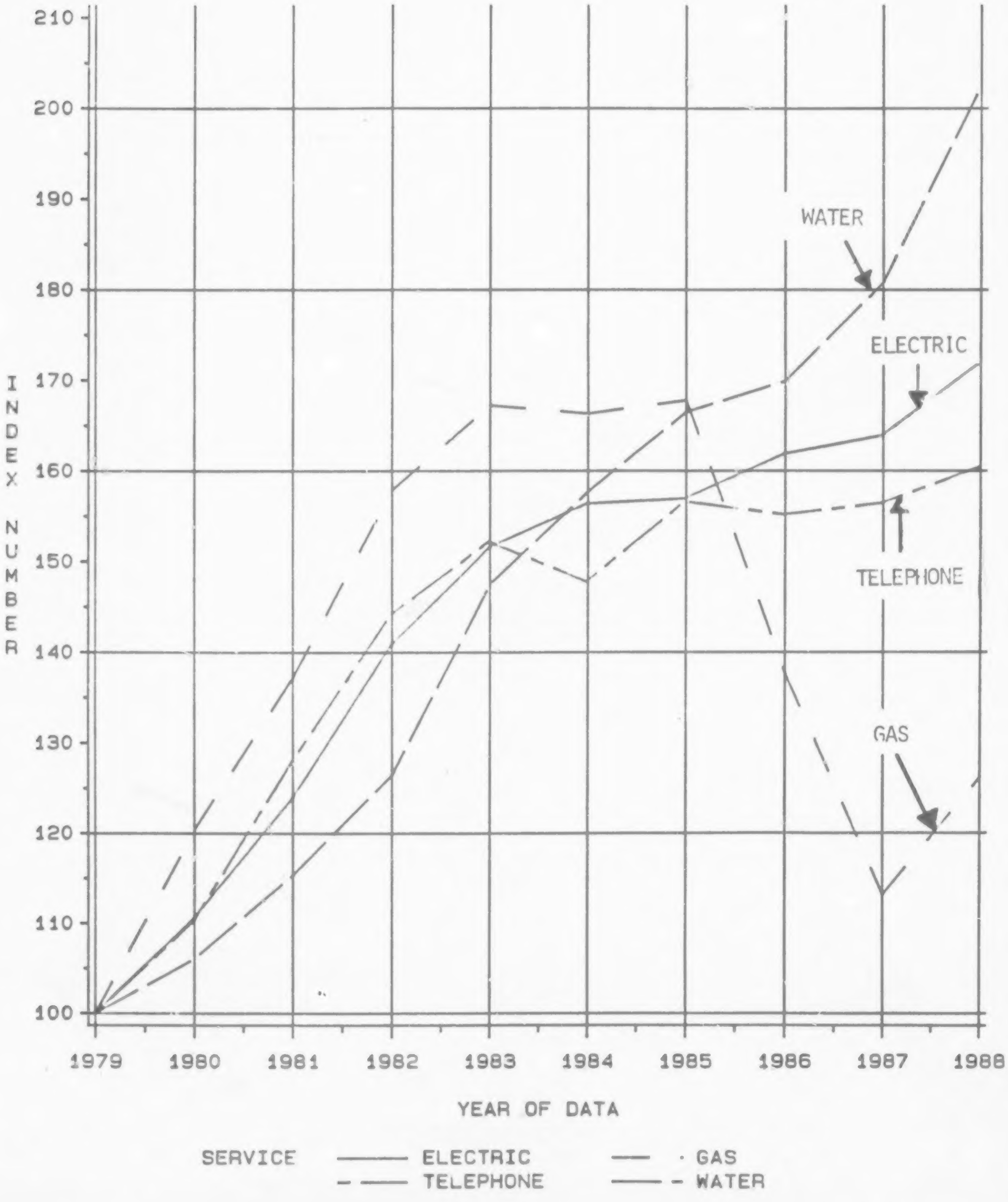
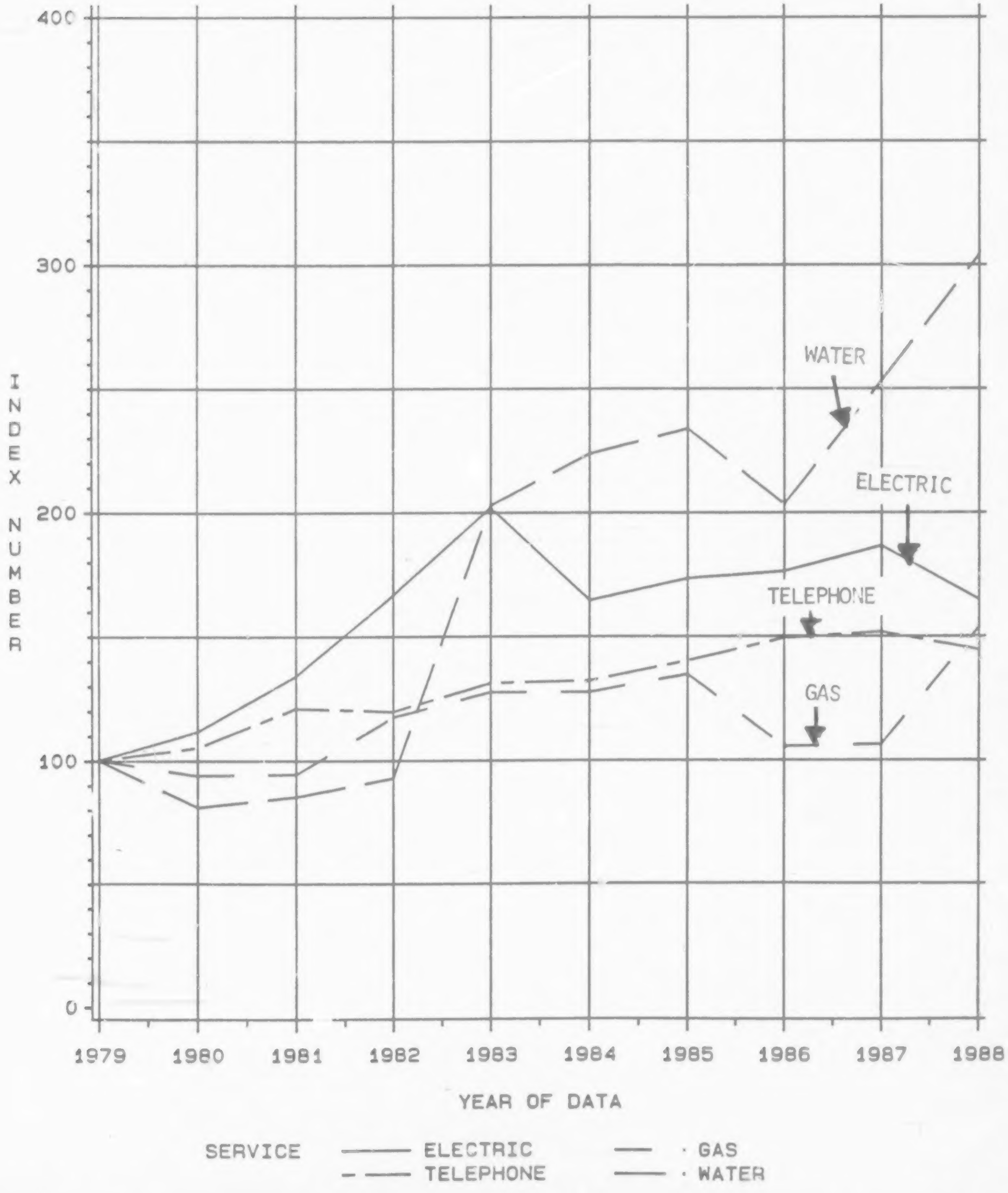


CHART 2

COMPARATIVE TRENDS OF NET OPERATING REVENUES



The number of public utilities operating in the State as of December 31, 1988 is summarized below. These figures include all utilities regardless of size.

	Total	Private	Municipal
Electric	94	12	82
Gas	15	14	1
Telephone	99*	99*	0
Water	556	12	544
Heating	2	1	1
Total	766	138	628

* There are 18 resellers authorized to be alternative telecommunications and five telephone companies offering resale of MTS and WATS within their telephone franchise areas. Three cellular mobile companies which are operating as alternative telecommunications utilities per 05-TI-106. Fourteen are deregulated per s.196.202(2). One is pending application for ATU status and two cable telecommunications.

FINANCIAL STATISTICS

Statistics on plant investment, capitalization and disposition of income are presented in this section of the bulletin. These data necessarily include all operations of Wisconsin utilities, including out-of-state operations of those utilities operating in neighboring states.

A number of municipalities include nonutility sewer operations in their water utility reports. Figures on income and capitalization reflect these operations when reported. It is to be emphasized, however, that sewer coverage presented herein is by no means complete since many municipalities operate their nonutility sewer departments independently and do not report those operations.

Utility Plant in Service and Accumulated Provisions for Depreciation:

Table 1 presents a summary of utility plant in service and accumulated provisions for depreciation of Wisconsin utilities during the period from 1986 through 1988. Charts 3, 4 and 5 show similar data in graphic form over the past 9 years.

About $14.2 billion are invested in utility plant by Wisconsin utilities. Of this amount, electric plant makes up 50.0% with telephone, water and gas plant amounting to 27.9%, 10.4% and 9.8% respectively. Sewer and heating plant make up another 1.5%.

Electric cooperatives and companies engaged in intrastate transmission of natural gas do not fall under the jurisdiction of the Wisconsin Public Service Commission and therefore, data covering these companies are not included in this study. Electric cooperatives did have gross plant investment in Wisconsin of about $762 million as of December 31, 1988. Gas pipeline companies had about $285.1 million in gross plant as of the same date.

Except for water and sewer service, public utility operations in Wisconsin are predominantly under private management. For example, municipalities own and operate 98% of the total water plant but only 4% of the electric plant, about 0.05% of the gas distribution plant and no telephone plant.

As of December 31, 1988, Wisconsin electric utilities had accumulated provisions for depreciation equal to 47% of electric plant in service. Telephone utilities had accumulated 34%, water utilities 22% and gas utilities 48%. The comparable figures in 1979 were 36%, 22%, 20% and 35% respectively.

Charts 3, 4, 5 and 6 show that utility plant in service has increased steadily over the past 9 years. Electric utility plant has increased 68% since 1979. Telephone plant is up 49% while water and gas plant increased 61% and 59% for the period.

Capitalization:

Capitalization of public utilities in Wisconsin is summarized in Table 2 and Charts 7 and 8. Total capitalization was about $8,795 million in 1988. Of that amount 78% was accounted for by private utilities with the remaining 22% being municipal investment.

Total capitalization was up 6.3% over 1987, and up 43% over the past 10 years. Corresponding figures are 6.3% and 36% for private utilities and 6.5 and 77% for municipals. Charts 7 and 8 give graphic representation of these figures.

CHART 3

UTILITY PLANT IN SERVICE
AND ACCUMULATED PROVISION FOR DEPRECIATION
ELECTRIC UTILITIES

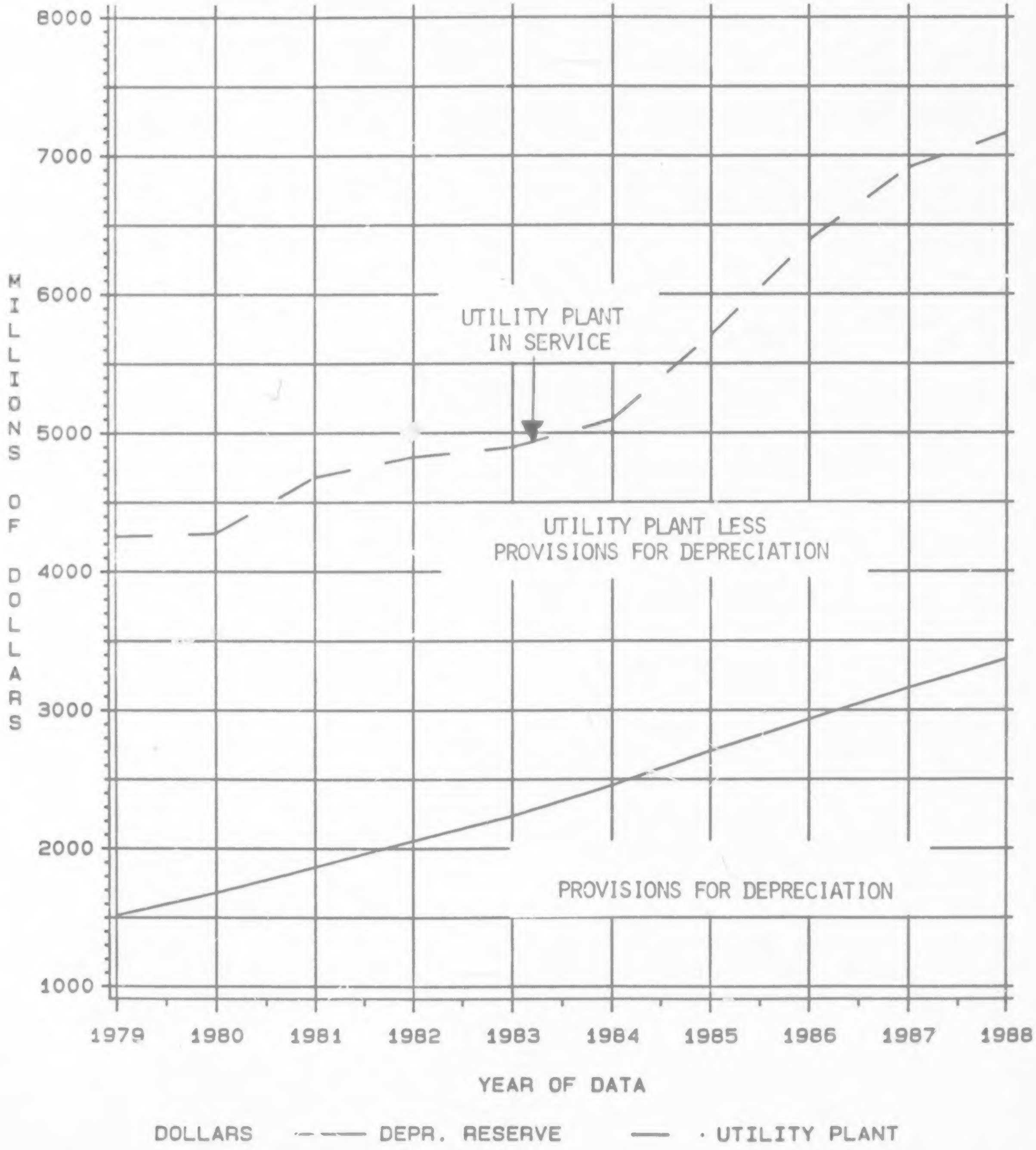


CHART 4

UTILITY PLANT IN SERVICE AND ACCUMULATED PROVISION FOR DEPRECIATION TELEPHONE UTILITIES

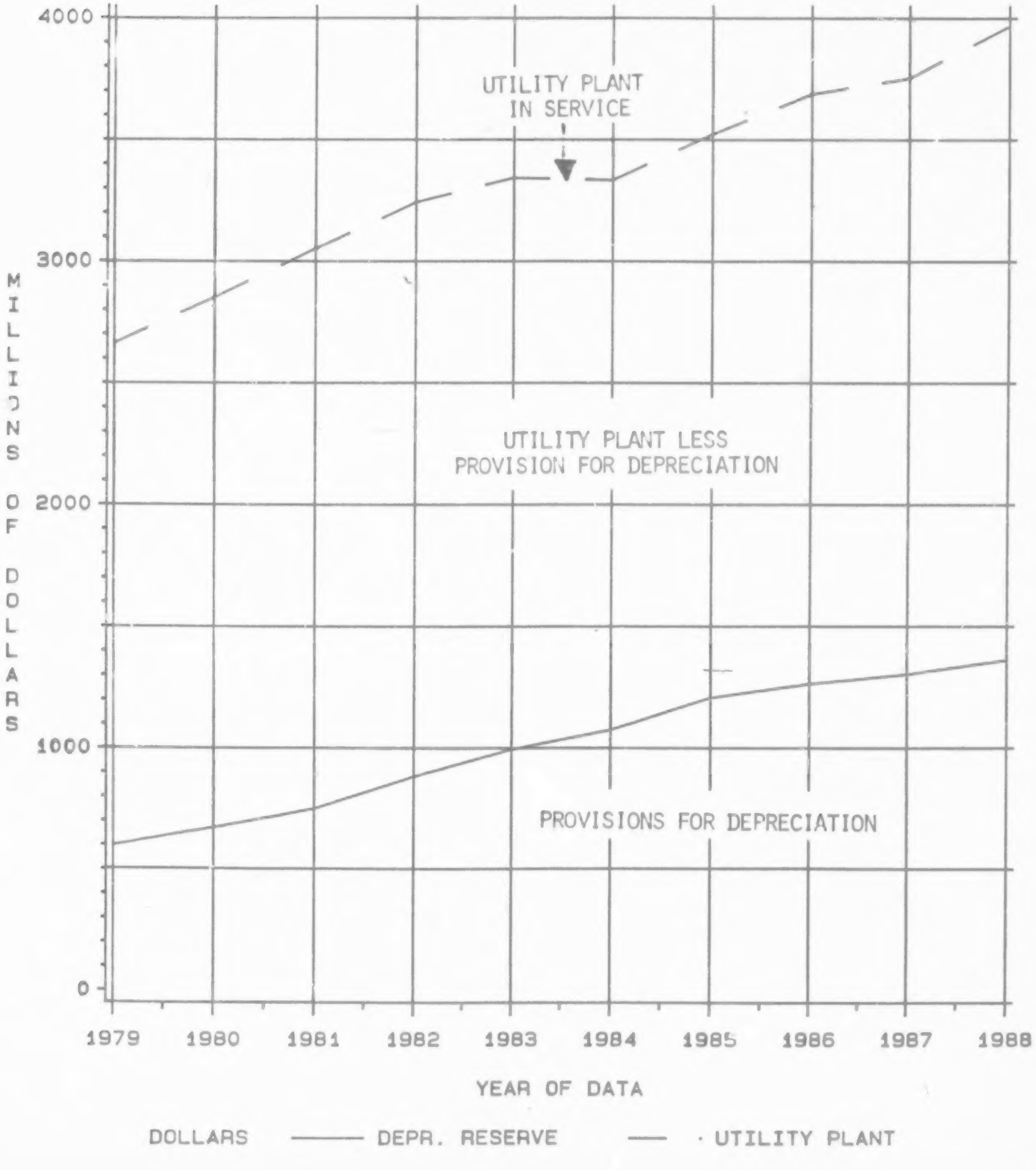


CHART 5

UTILITY PLANT IN SERVICE AND ACCUMULATED PROVISION FOR DEPRECIATION WATER UTILITIES

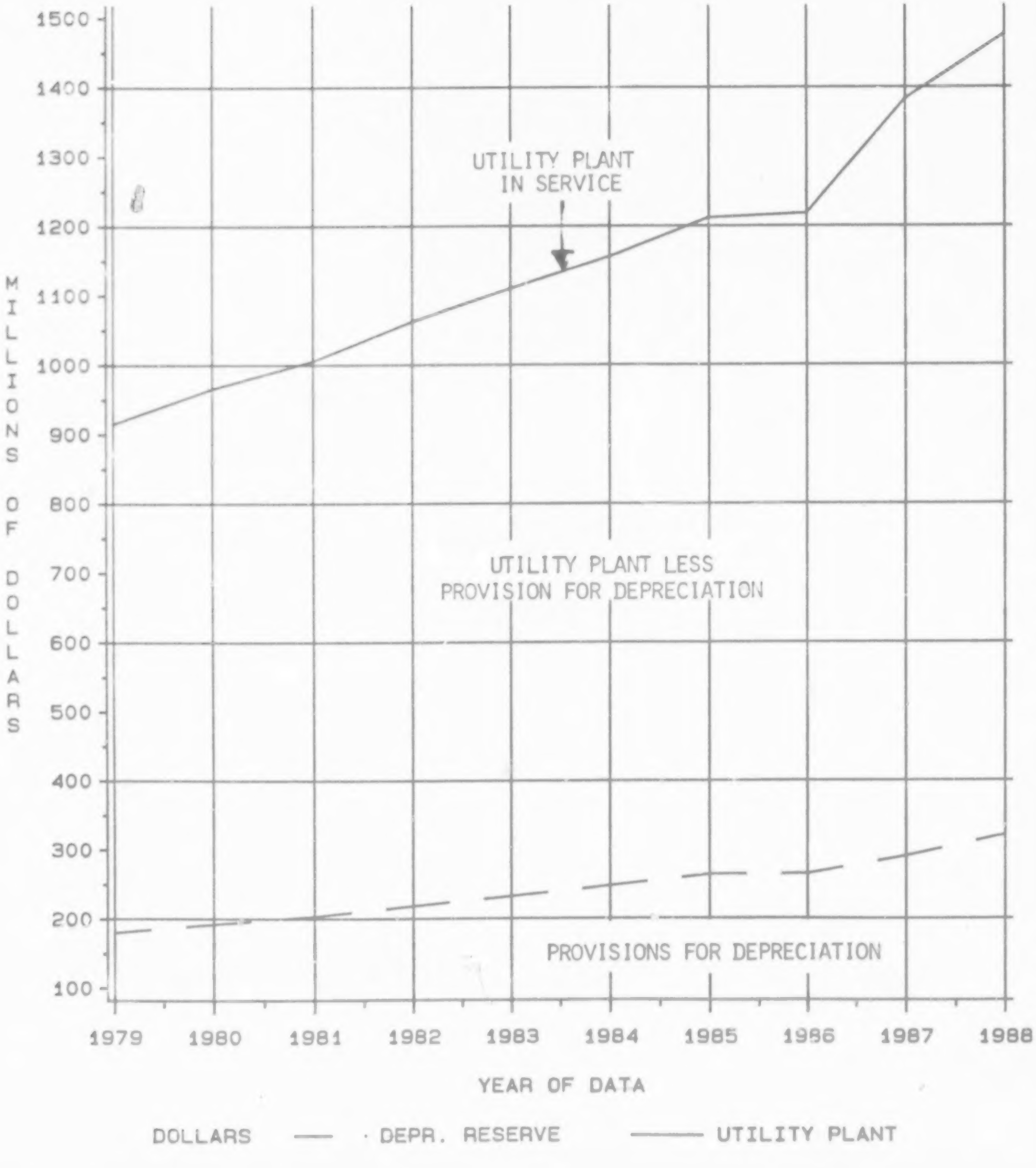


CHART 6

UTILITY PLANT IN SERVICE
AND ACCUMULATED PROVISION FOR DEPRECIATION
GAS UTILITIES

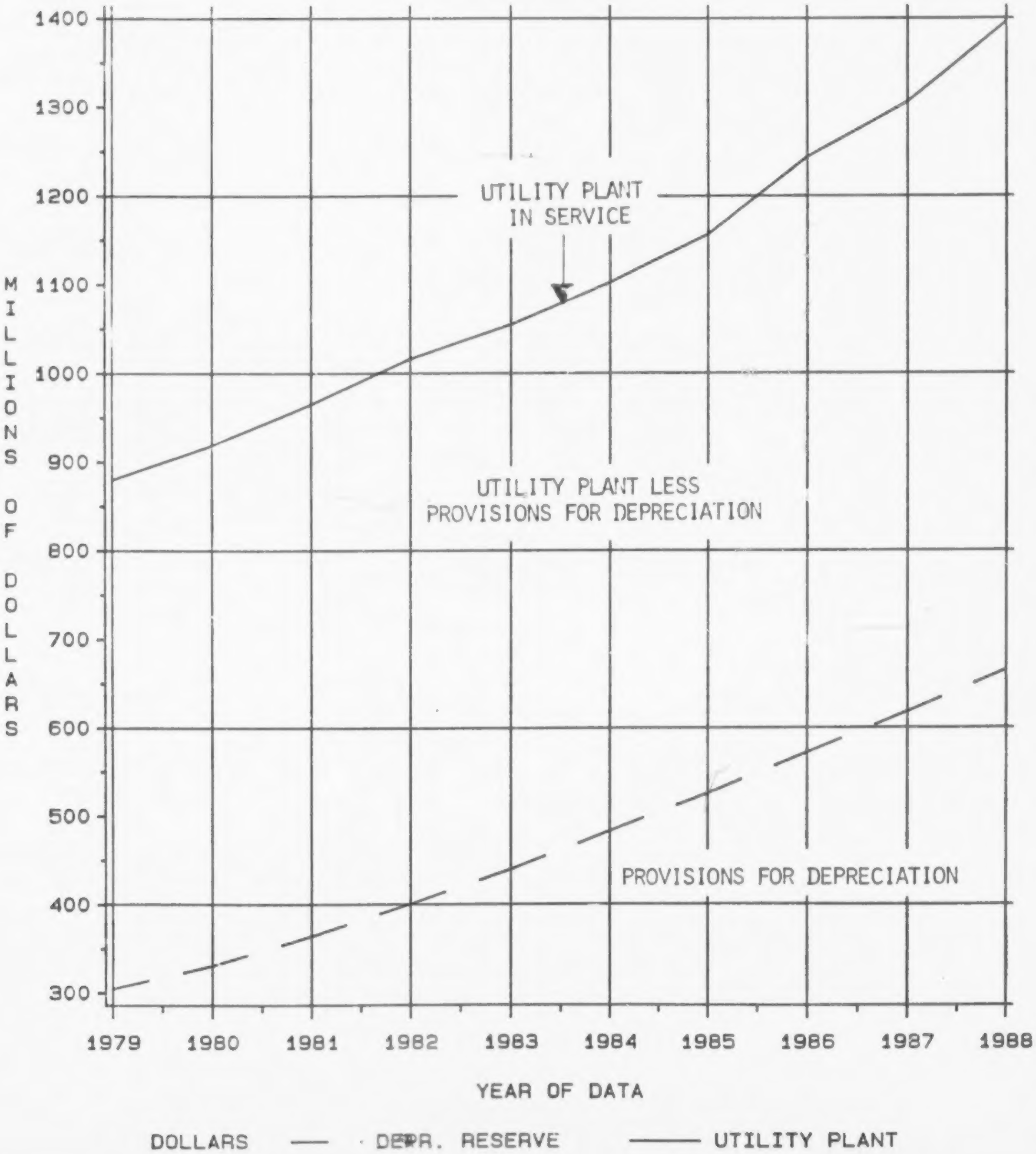


CHART 7

CAPITALIZATION OF PRIVATE UTILITIES OPERATING IN WISCONSIN

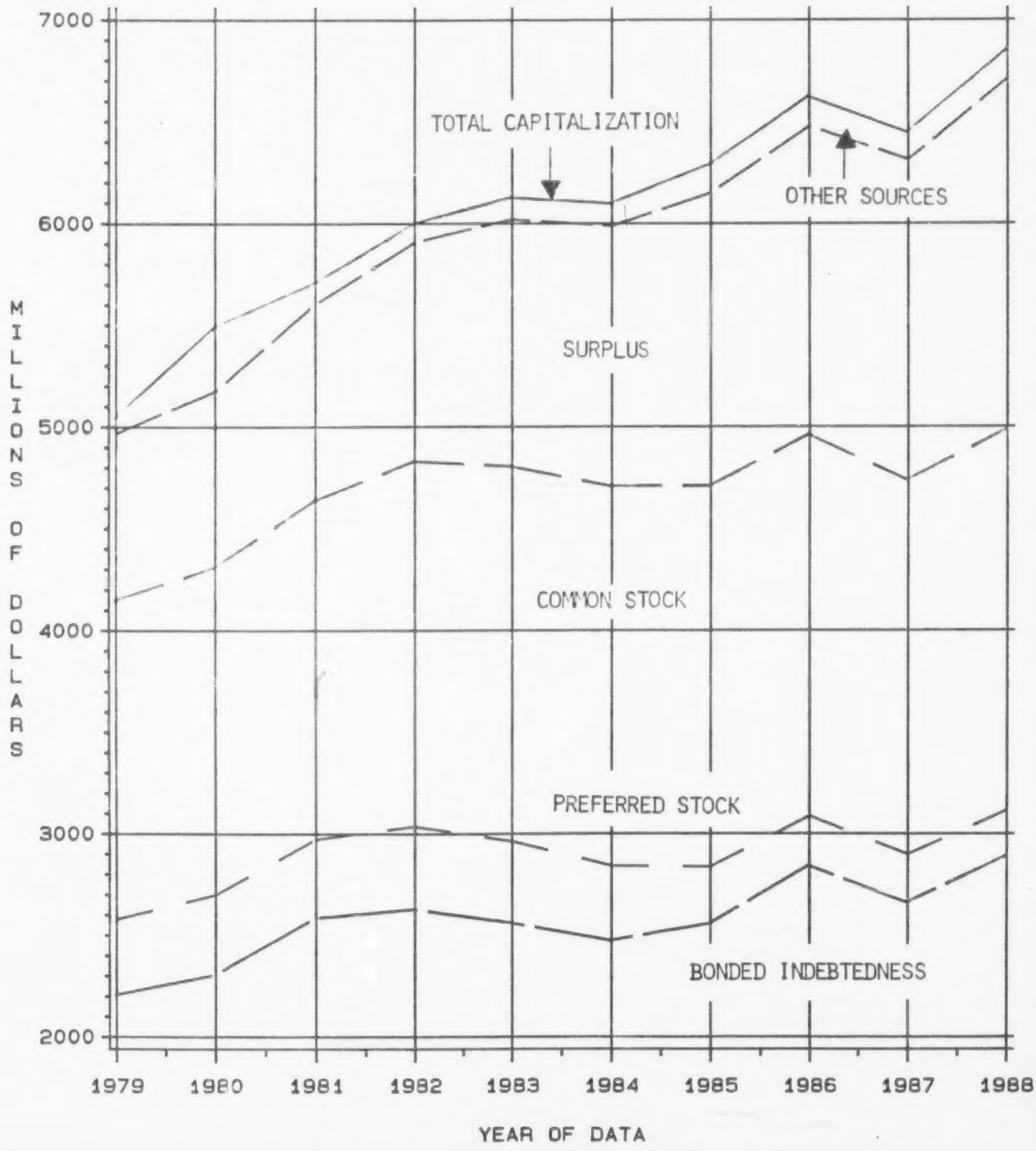


CHART 8

CAPITALIZATION OF MUNICIPAL UTILITIES OPERATING IN WISCONSIN

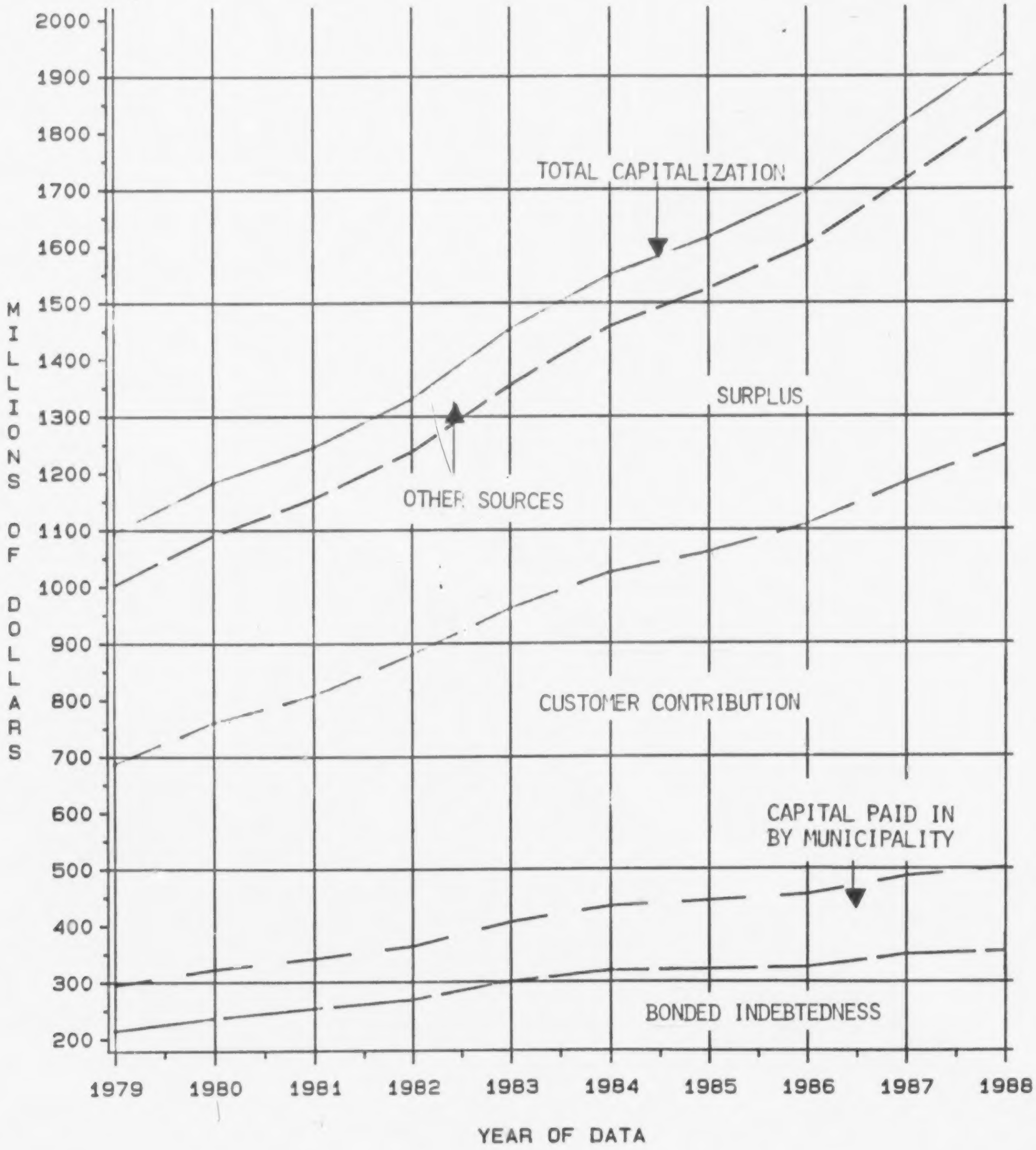


Chart 7 further shows bonds and common stock continue to be the largest source of capital for private utilities. Surplus also contributes a substantial share of total capitalization.

As shown below, Contributions in Aid of Construction is the largest item of municipal utility Capitalization. Surplus and Bonded Debt are next in size Capital Paid in by Municipalities was only about 7.6% of the total at the end of 1988.

A comparison of the capitalization of private and municipal utilities as of December 31, 1988 is presented below:

	Private Utilities	Municipal Utilities
Bonded Indebtedness	42.2%	18.4%
Common Stock or Capital Paid in by Municipality	27.4	7.6
Preferred Stock	3.2	0.0
Surplus	25.1	30.2
Advances from Affiliates or Municipalities	0.0	5.1
Contributions in Aid of Construction	1.6	38.5
Customer Advances in Aid of Construction	0.5	0.2
Total	100.0%	100.0%

Disposition of Income

The term 'gross income' as used here, is a net figure representing total income available to meet interest payments, dividends and similar items. The disposition of gross income is summarized in Table 3 and Charts 9 and 10.

Total gross income of private utilities in Wisconsin totaled $804.5 million in 1988, 5.3% above the preceding year. Interest and related deductions absorbed $252.7 million, preferred stock dividends $14.7 million, dividends on common stock $384.4 million, and $195.3 million were carried to surplus.

Municipal utilities had $78.6 million in gross income in 1988, up 17.2% from the preceding year. Interest and related charges amounted to $34.0 million, $1.0 million were appropriated to municipalities, and $43.5 million were carried to surplus.

Payments during 1988 on each class of security or equity, expressed as a percent of average book values at the beginning and close of the year are compared below:

	Private Utilities	Municipal Utilities
Interest on Long-Term Debt Divided by Long-Term Debt	8.22%	7.40%
Perferred Stock Dividends Divided by Preferred Stocks	6.63	0.00
Common Stock Dividends Divided by Common Stock	20.50	0.00
Appropriations to City Divided by Capital Paid in by Municipality	0.0	0.72
Common Stock Dividends Divided by Common Stock Plus Surplus	10.69	0.00
Appropriations to City Divided by Capital Paid in by Municipality Plus Surplus	0.00	0.14

CHART 9

DISPOSITION OF GROSS INCOME
PRIVATE UTILITIES OPERATING IN WISCONSIN

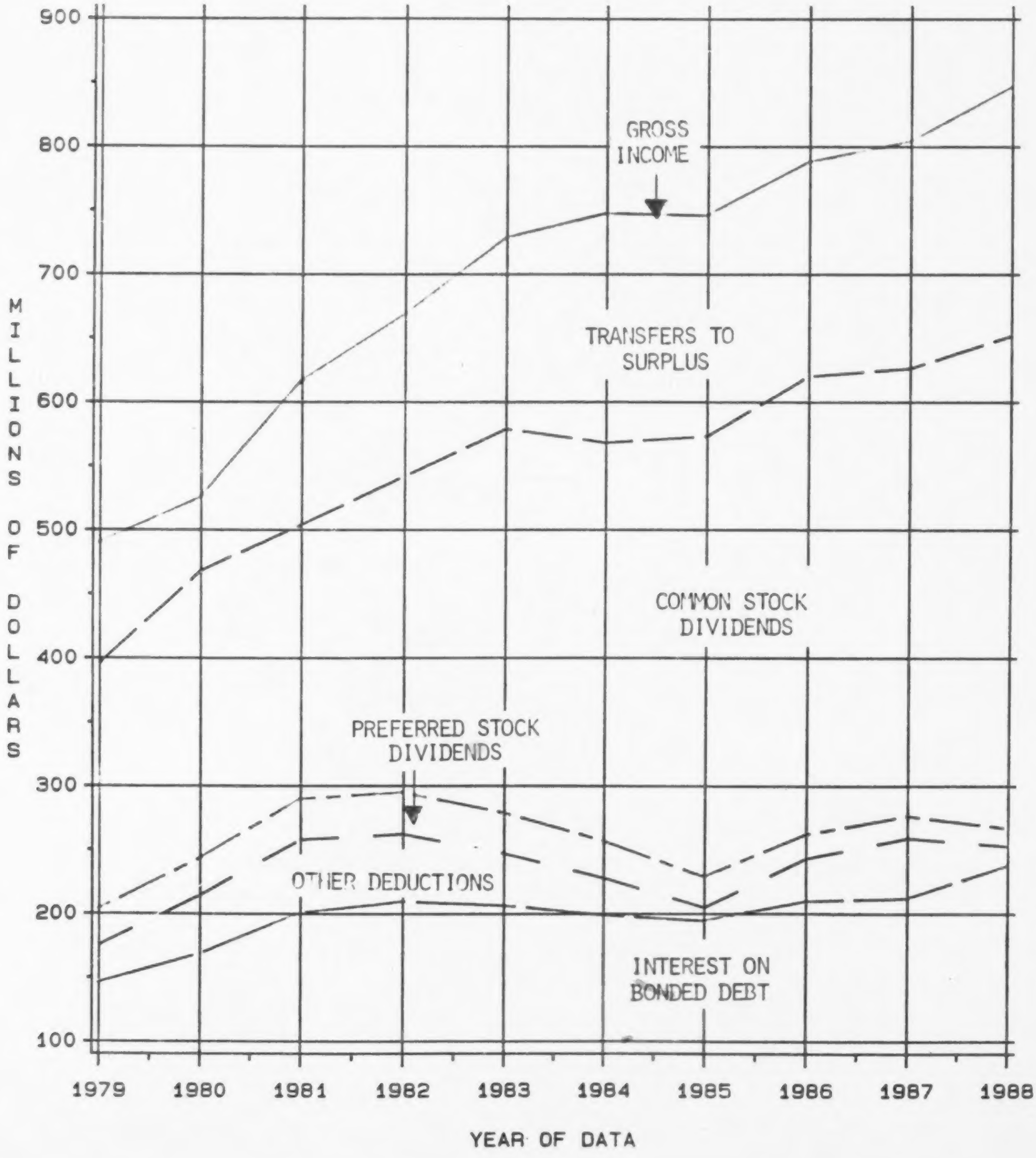


CHART 10

DISPOSITION OF GROSS INCOME
MUNICIPAL UTILITIES OPERATING IN WISCONSIN

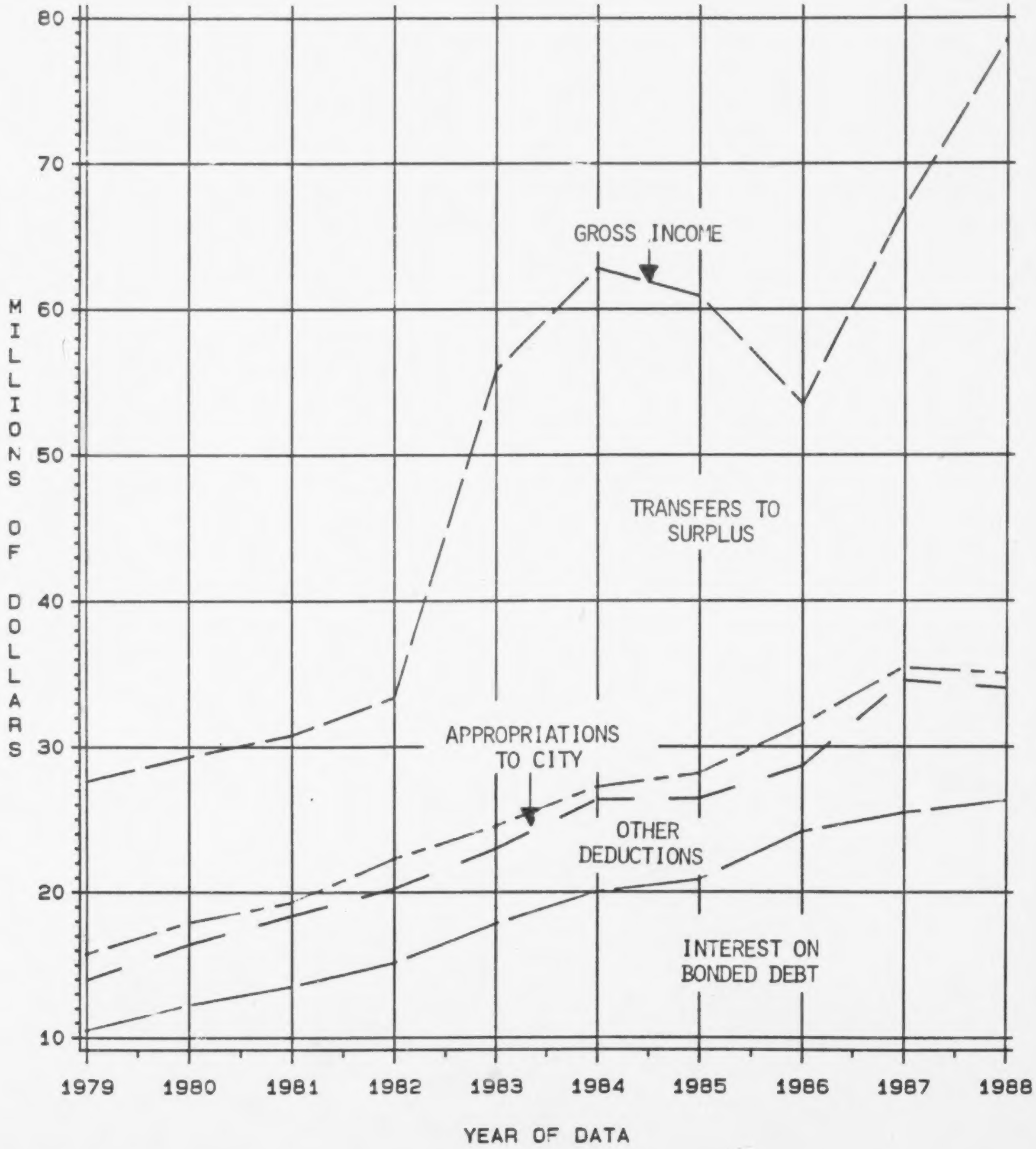


TABLE 1
SUMMARY OF UTILITY PLANT IN SERVICE AND ACCUMULATED PROVISION FOR DEPRECIATION PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1988-1986

All Utilities	Dec. 31, 1988	Dec. 31, 1987	Dec. 31, 1986
Utility Plant in Service 2/ 3/			
Electric	$ 7,164,185,623	$ 6,915,424,073	$ 6,390,741,879
Gas	1,395,995,774	1,305,865,416	1,243,722,101
Water	1,476,322,656	1,383,417,979	1,218,413,206
Sewer	180,082,116	179,580,359	246,780,185
Telephone	3,967,321,748	3,753,634,010	3,687,800,000
Heating	27,514,060	27,076,140	26,331,551
Total	$14,211,421,977	$13,564,997,977	$12,813,788,922
Accumulated Provision for Depreciation 2/ 3/			
Electric	$ 3,367,723,807	$ 3,160,410,007	$ 2,934,027,443
Gas	665,101,604	617,947,314	571,794,725
Water	321,398,334	290,503,991	264,758,391
Sewer	33,858,771	42,260,391	39,498,665
Telephone	1,361,600,360	1,303,470,397	1,263,400,000
Heating	12,246,408	11,451,485	11,804,001
Total	$ 5,761,929,284	$ 5,426,043,585	$ 5,085,283,225
Utility Plant Less Provision For Depreciation 2/ 3/			
Electric	$ 3,796,461,816	$ 3,755,014,066	$ 3,456,714,436
Gas	730,894,170	687,918,102	671,927,376
Water	1,154,924,322	1,092,913,988	953,654,815
Sewer	146,223,345	137,319,968	207,281,520
Telephone	2,605,721,388	2,450,163,613	2,424,400,000
Heating	15,267,652	15,624,655	14,527,550
Total	$ 8,449,492,693	$ 8,138,954,392	$ 7,728,505,697
Private Utilities			
Utility Plant in Service 2/ 3/			
Electric	$ 6,899,328,139	$ 6,640,687,578	$ 6,120,494,505
Gas	1,395,284,973	1,305,210,143	1,243,087,586
Water	31,801,837	30,163,519	25,068,725
Sewer	0	0	0
Telephone	3,967,321,748	3,753,634,010	3,687,800,000
Heating	27,201,114	26,762,619	26,018,158
Total	$12,320,937,811	$11,756,457,869	$11,102,468,974

TABLE 1 (Concluded)

SUMMARY OF UTILITY PLANT IN SERVICE AND ACCUMULATED PROVISION FOR DEPRECIATION PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1988-1986

Private Utilities (Cont.)	Dec. 31, 1988	Dec. 31,1987	Dec. 31, 1986
Accumulated Provision for Depreciation 2/ 3/			
Electric	$ 3,234,213,764	$ 3,035,548,463	$ 2,813,754,622
Gas	664,803,641	617,669,659	571,535,933
Water	8,208,632	7,684,454	7,069,349
Sewer	0	0	0
Telephone	1,361,600,360	1,303,470,397	1,263,400,000
Heating	12,185,456	11,397,706	11,758,010
Total	$ 5,281,011,853	$ 4,975,770,679	$ 4,667,517,914
Utility Plant Less Provision For Depreciation 2/ 3/			
Electric	$ 3,665,114,375	$ 3,605,139,115	$ 3,306,739,883
Gas	730,481,332	687,540,484	671,551,653
Water	23,593,205	22,479,065	17,999,376
Sewer	0	0	0
Telephone	2,605,721,388	2,450,163,613	2,424,400,000
Heating	15,015,658	15,364,913	14,260,148
Total	$ 7,039,925,958	$ 6,780,687,190	$ 6,434,951,060
Municipal Utilities			
Utility Plant in Service 2/			
Electric	$ 264,857,484	$ 274,736,495	$ 270,247,374
Gas	710,801	655,273	634,515
Water	1,444,520,819	1,353,254,460	1,193,344,481
Sewer	180,082,116	179,580,359	246,780,185
Heating	312,946	313,521	313,393
Total	$ 1,890,484,166	$ 1,808,540,108	$ 1,711,319,948
Accumulated Provision for Depreciation 2/			
Electric	133,510,043	$ 124,861,544	$ 120,272,821
Gas	297,963	277,655	258,792
Water	313,189,702	282,819,537	257,689,042
Sewer	33,858,771	42,260,391	39,498,665
Heating	60,952	53,779	45,991
Total	$ 480,917,431	$ 450,272,906	$ 417,765,311
Utility Plant Less Provision for Depreciation 2/			
Electric	$ 131,347,441	$ 149,874,951	$ 149,974,553
Gas	412,838	377,618	375,723
Water	1,131,331,117	1,070,434,923	935,655,439
Sewer	146,223,345	137,319,968	207,281,520
Heating	251,994	259,742	267,402
Total	$ 1,409,566,735	$ 1,358,267,202	$ 1,293,554,637

1/ Total plant includes out-of-state properties.
2/ Including apportionment of common property.
3/ Excluding utility plant leased to others.

TABLE 2

COMPARATIVE STATEMENT OF CAPITALIZATION
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1988-1986

	Dec. 31, 1988	Dec. 31,1987	Dec. 31, 1986
All Utilities			
Long-Term Debt Outstanding	$ 3,249,749,366	$ 3,015,128,010	$ 3,173,780,135
Advances from Affiliates or Municipality	99,853,110	99,456,786	111,211,671
Preferred Stock Outstanding	221,467,900	232,637,800	239,534,320
Common Stock Outstanding and Related Accounts	1,874,877,081	1,844,948,758	1,880,459,696
Capital Paid in by Municipality	146,371,712	136,767,507	126,758,156
Surplus	2,306,076,513	2,104,431,826	2,003,892,397
Customers' Advances in Aid of Construction	37,601,306	32,564,700	28,671,084
Contributions in Aid of Construction	858,873,160	804,897,516	760,348,795
Total	$ 8,794,870,148	$ 8,270,832,903	$ 8,324,656,254
Private Utilities			
Long-Term Debt Outstanding	$ 2,893,974,439	$ 2,664,985,091	$ 2,846,439,763
Advances from Affiliates	13,500	11,500	20,005,000
Preferred Stock Outstanding	221,467,900	232,637,800	239,534,320
Common Stock Outstanding and Related Accounts	1,874,877,081	1,844,948,758	1,880,459,696
Surplus	1,720,516,309	1,570,250,434	1,511,923,562
Customers' Advances in Aid of Construction	33,654,313	29,670,767	25,854,039
Contributions in Aid of Construction	111,533,652	107,750,104	104,481,697
Total	$ 6,856,037,194	$ 6,450,254,454	$ 6,628,698,077
Municipal Utilities			
Long-Term Debt Outstanding	$ 355,774,927	$ 350,142,919	$ 327,340,372
Advances from Municipality	99,839,610	99,445,286	91,206,671
Capital Paid in by Municipality	146,371,712	136,767,507	126,758,156
Surplus	585,560,204	534,181,392	491,968,835
Customers' Advances in Aid of Construction	3,946,993	2,893,933	2,817,045
Contributions in Aid of Construction	747,339,508	697,147,412	655,867,098
Total	$ 1,938,832,954	$ 1,820,578,449	$ 1,695,958,177

1/ These data necessarily represent total company figures. A few companies operate outside of Wisconsin. Electric, gas, water, sewer, heating and telephone utilities are included.

TABLE 3

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1988-1986

	1988	1987	1986
All Utilities			
Net Operating Revenues			
Electric	$458,652,911	$448,937,730	$412,920,969
Gas	86,456,290	60,867,449	61,448,213
Telephone	250,602,756	263,096,658	258,720,180
Water	41,617,625	34,659,397	27,819,199
Sewer	3,202,112	2,721,058	1,858,216
Steam and Hot Water Heating	1,481,620	817,078	1,259,972
Total	$842,013,314	$811,099,370	$764,026,749
Income from Plant Leased to Others	$ 443,861	$ 14,621	$ 8,439
Income from Merchandising and Jobbing	158,832	156,289	298,870
Other Income - Net	83,069,204	60,306,859	77,798,232
Gross Income	$925,685,211	$871,577,139	$842,132,290
Interest on Long-Term Debt	$264,287,870	$238,086,911	$234,399,311
Amortization of Debt Discount and Premium	4,278,272	3,345,214	2,836,131
Interest on Debt to Associated Companies or City	6,451,618	6,496,183	9,566,891
Other Deductions	11,738,964	45,619,891	24,900,564
Net Income	$638,928,487	$578,028,940	$570,429,393
Dividend Appropriations on Preferred Stock	$ 14,679,763	$ 17,965,529	$ 19,516,256
Dividend Appropriations on Common Stock 2/	384,371,248	349,358,768	357,540,268
Appropriations to City	1,057,871	913,191	2,863,974
Balance Transferred to Surplus	$238,819,605	$209,791,452	$190,508,895

(Continued)

TABLE 3 (Continued)

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1988-1986

	1988	1987	1986
Private Utilities			
Net Operating Revenues			
Electric	$447,545,427	$438,633,137	$405,647,466
Gas	86,414,549	60,878,010	61,450,170
Telephone	250,602,756	263,096,658	258,720,180
Water	2,219,156	2,343,695	1,357,420
Sewer	0	0	0
Steam and Hot Water Heating	1,471,626	821,781	1,258,926
Total	$788,253,514	$765,773,281	$728,434,162
Income from Plant Leased to Others	$ 440,092	$ 13,221	$ 7,539
Income from Merchandising and Jobbing	(37,722)	(81,795)	14,746
Other Income - Net	58,467,827	38,817,052	60,207,284
Gross Income	$847,123,711	$804,521,759	$788,663,731
Interest on Long-Term Debt	$237,966,449	$212,599,615	$210,223,272
Amortization of Debt Discount and Premium	3,200,174	2,401,247	1,855,118
Interest on Debt to Associated Companies	836,263	1,209,667	4,145,188
Other Deductions	10,740,623	42,784,291	26,801,984
Net Income	$594,380,202	$545,526,939	$545,638,169
Dividend Appropriations on Preferred Stock	$ 14,679,763	$ 17,965,529	$ 19,516,256
Dividend Appropriations on Common Stock 2/	384,371,248	349,358,768	357,540,268
Balance Transferred to Surplus	$195,329,191	$178,202,642	$168,581,645

TABLE 3 (Concluded)

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1988-1986

	1988	1987	1986
Municipal Utilities			
Net Operating Revenue			
Electric	$11,107,484	$10,304,593	$ 7,273,503
Gas	41,741	(10,561)	(1,957
Water	39,398,469	32,315,702	26,461,779
Sewer	3,202,112	2,721,058	1,858,216
Steam and Hot Water Heating	9,994	(4,703)	1,046
Total	$53,759,800	$45,326,089	$35,592,587
Income from Plant Leased to Others	$ 3,769	$ 1,400	$ 900
Income from Merchandising and Jobbing	196,554	238,084	284,124
Other Income - Net	24,601,377	21,489,807	17,590,948
Gross Income	$78,561,500	$67,055,380	$53,468,559
Interest on Long-Term Debt	$26,321,421	$25,487,296	$24,176,039
Amortization of Debt Discount and Premium	1,078,098	943,967	981,013
Interest on Debt to City	5,615,355	5,286,516	5,421,703
Other Deductions	998,341	2,835,600	(1,901,420
Net Income	$44,548,285	$32,502,001	$24,791,224
Appropriations to City	$ 1,057,871	$ 913,191	$ 2,863,974
Balance Transferred to Surplus	$43,490,414	$31,588,810	$21,927,250

1/ Includes out-of-state operations of Wisconsin utilities.
2/ Excluding Stock Dividends.

ELECTRIC UTILITY STATISTICS

Comparative statistics of Wisconsin electric utilities for the 3-year period, 1986 to 1988, are summarized in this section. Out-of-state operations are excluded (except in tables 7, 8 and 9 where data on out-of-state sales, purchases and generating plant are presented).

The following tables and charts present the data covering electric utility operations

- Table 4 - Comparative Statement of Revenues and Expenses, 1988-1986
- Table 5 - Sales to Ultimate Consumers, 1988-1986
- Table 6 - Comparative Statement of Operating Expenses, 1988-1986
- Table 7 - Summary of Megawatt Hours Sold and Used, 1988-1986
- Table 8 - Megawatt Hours Generated and Purchased, 1988-1986
- Table 9 - Generating Plant, Substation and Transmission Line Data, 1988-1986
- Table 10 - Condensed Summary of 1988 Operations - Individual Private Electric Utilities
- Table 11 - Condensed Summary of 1988 Operations - Individual Municipal Electric Utilities
- Chart 11 - Residential Electric Customers - Annual Kilowatt Hour Sales Wisconsin and United States, 1979-1988
- Chart 12 - Residential Electric Customers - Revenue per Kilowatt Hour Wisconsin and United States, 1979-1988
- Chart 13 - Residential Electric Customers - Average Annual Bill Wisconsin and United States, 1979-1988
- Chart 14 - Comparison of Revenues and Expenses, Wisconsin Electric Utilities, 1979-1988
- Chart 15 - Revenues from Sales to Ultimate Consumers by Individual Wisconsin Electric Utilities, Percent of Total, 1988

Electric Consumers

The total number of ultimate (retail) electric consumers increased 1.39% over 1987. Residential customers increased 1.67% and rural customers decreased (2.18)%. Commercial and industrial customers increased 1.78%.

As has already been pointed out, electric cooperatives are not included in the tables. These organizations served an estimated 174,437 customers during 1988. This was 54% of all rural electric customers served in the state.

Revenue and Consumption Ratios

Kilowatt hours sold to ultimate consumers in Wisconsin increased 5.21% during 1987. Commercial and industrial consumption increased 6.67% during the year as did residential at 7.09%. Rural consumption decreased 0.65% for the same period.

State-wide averages by class of service for revenue/megawatt hour are compared below:

	1988	1987	1986
Residential	$66.13	$66.58	$68.00
Commercial and Industrial	48.26	49.36	51.60
Rural	63.06	63.72	64.93
Public St. and Hwy. Lighting	73.99	72.48	72.27
Other Sales to Public Auth.	46.32	47.63	50.67
Interdepartmental Sales	50.09	49.86	51.80
Total Ultimate Consumers	$54.04	$54.95	$57.06

State-wide average ratios of kilowatt hour consumption per customer and revenue per customer are compared below for the three major classes of service:

	1988	1987	1986
Average Annual Use (kWh)			
Residential	7,599	7,215	7,121
Commercial and Industrial	142,619	136,089	130,524
Rural	14,540	14,133	14,328
Average Annual Bill			
Residential	$ 502.53	$ 480.39	$ 484.26
Commercial and Industrial	6,882.54	6,717.32	6,735.50
Rural	916.88	900.57	930.40

Average annual use for residential customers increased by 5.32%, commercial and industrial increased by 4.80% and rural decreased by 2.88%. Average annual bills for residential customers decreased by 4.61%. Commercial and industrial bills and rural bills decreased 2.46% and 1.81% respectively.

Residential revenue and consumption ratios of Wisconsin utilities are compared with national averages over a 9-year period in Charts 11, 12, and 13. In 1988 the average Wisconsin residential customer consumed 19.6% fewer kilowatt hours and paid an average bill that was 29.0% less than the national average.

Electric Utility Income Account

A summary of the income account of Wisconsin electric utilities for the past three years is presented in Table 4. A 9-year graphic comparison is made in Chart 14

Operating revenues continue to rise steadily with 1988 revenues up 4.90% over 1987. Total operating expenses increased 8.33% and net operating revenues increased by 11.74%.

Table 6 presents a detailed analysis of operating expenses, exclusive of depreciation and taxes. Of the classes of expense shown, sales promotion had the greatest increase which was 20.18%. Customer Accounts was least with a (4.47)% decrease.

A comparison of certain expense ratios of private and municipal utilities in 1988 is presented below:

1988 Expense Ratios

	Per Dollar of Revenue		Per Average Customer		Per MWh Sold	
	Pvt. (Ct)	Mun. (Ct)	Pvt.	Mun.	Pvt.	Mun.
Production and Trans.	48.02	77.72	$ 657.36	$ 920.65	$ 29.04	$ 38.66
Distribution	5.73	3.51	78.49	41.52	3.47	1.75
Customer Accounts	2.24	1.42	30.59	16.87	1.35	0.71
Customer Services	2.05	0.00	28.11	0.00	1.24	0.00
Sales Promotion 1/	0.05	0.04	0.73	0.52	0.03	0.02
Admin. & General	7.13	4.67	97.65	55.29	4.32	2.32
Total Oper. and Main.	65.22	87.36	892.93	1,034.85	39.45	43.46
Depreciation	10.22	4.40	139.90	52.08	6.18	2.19
Taxes O/T Inc. Taxes	4.52	3.53	61.85	41.75	2.73	1.75
Income Taxes	4.74	0.00	64.85	0.00	2.87	0.00
Total Operating Exp.	84.70	95.29	$1,159.53	$1,128.68	$ 51.23	$ 47.40

1/ Includes customer service expenses for municipally owned utilities.

CHART 11
ANNUAL KILOWATT HOUR SALES
RESIDENTIAL ELECTRIC CUSTOMERS

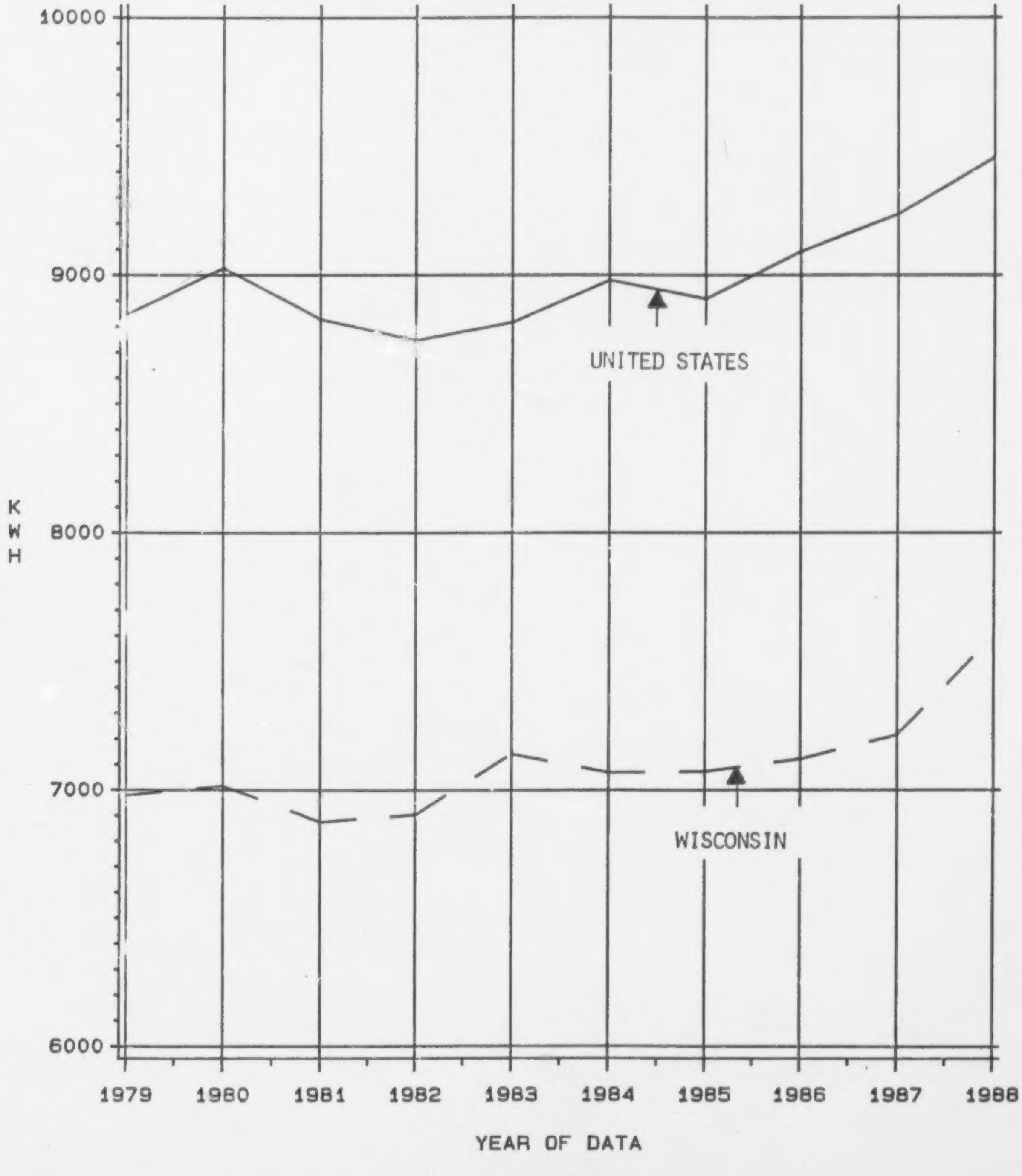


CHART 12

REVENUE PER KILOWATT HOUR
RESIDENTIAL ELECTRIC CUSTOMERS

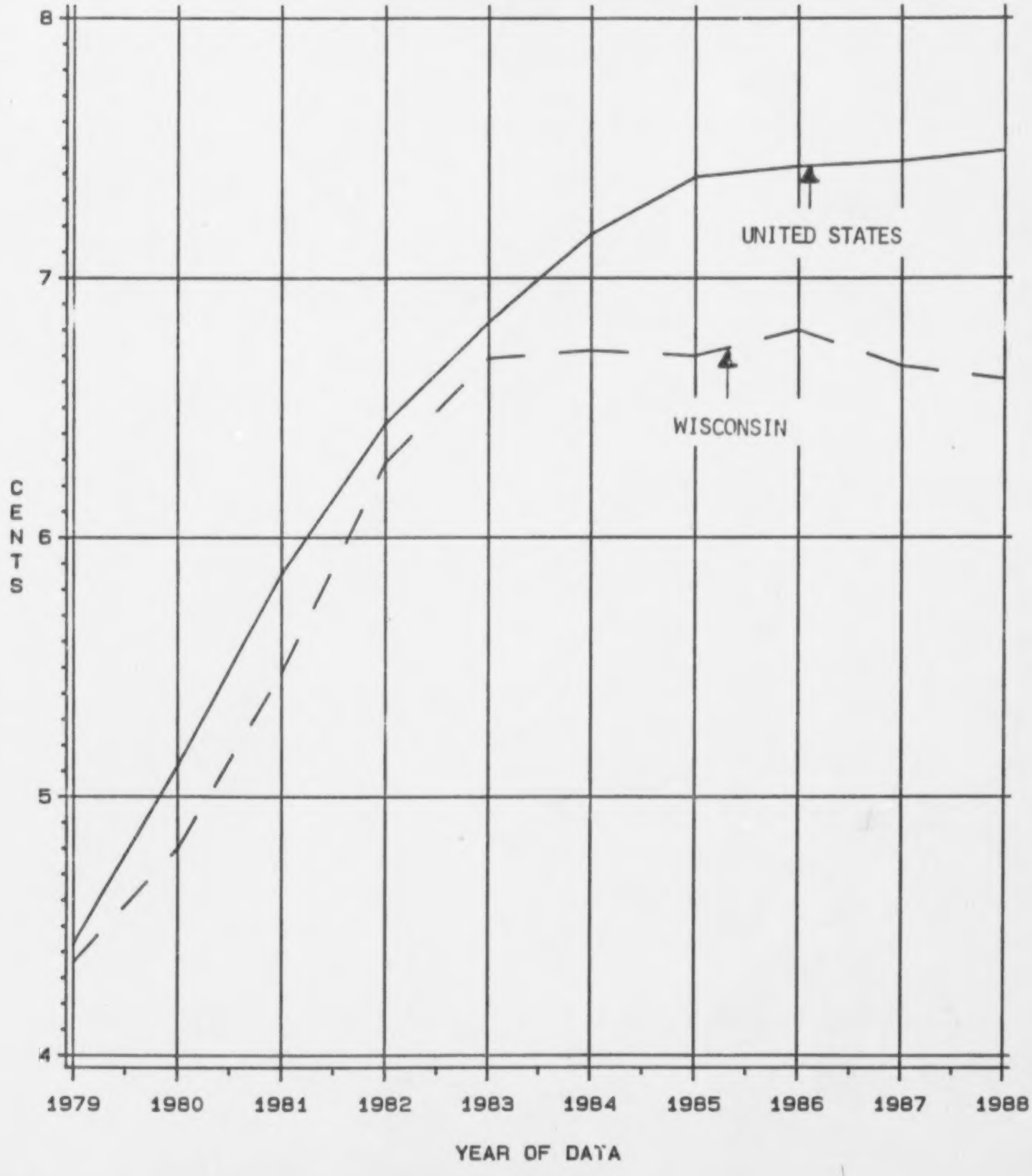


CHART 13
AVERAGE ANNUAL BILL
RESIDENTIAL ELECTRIC CUSTOMERS

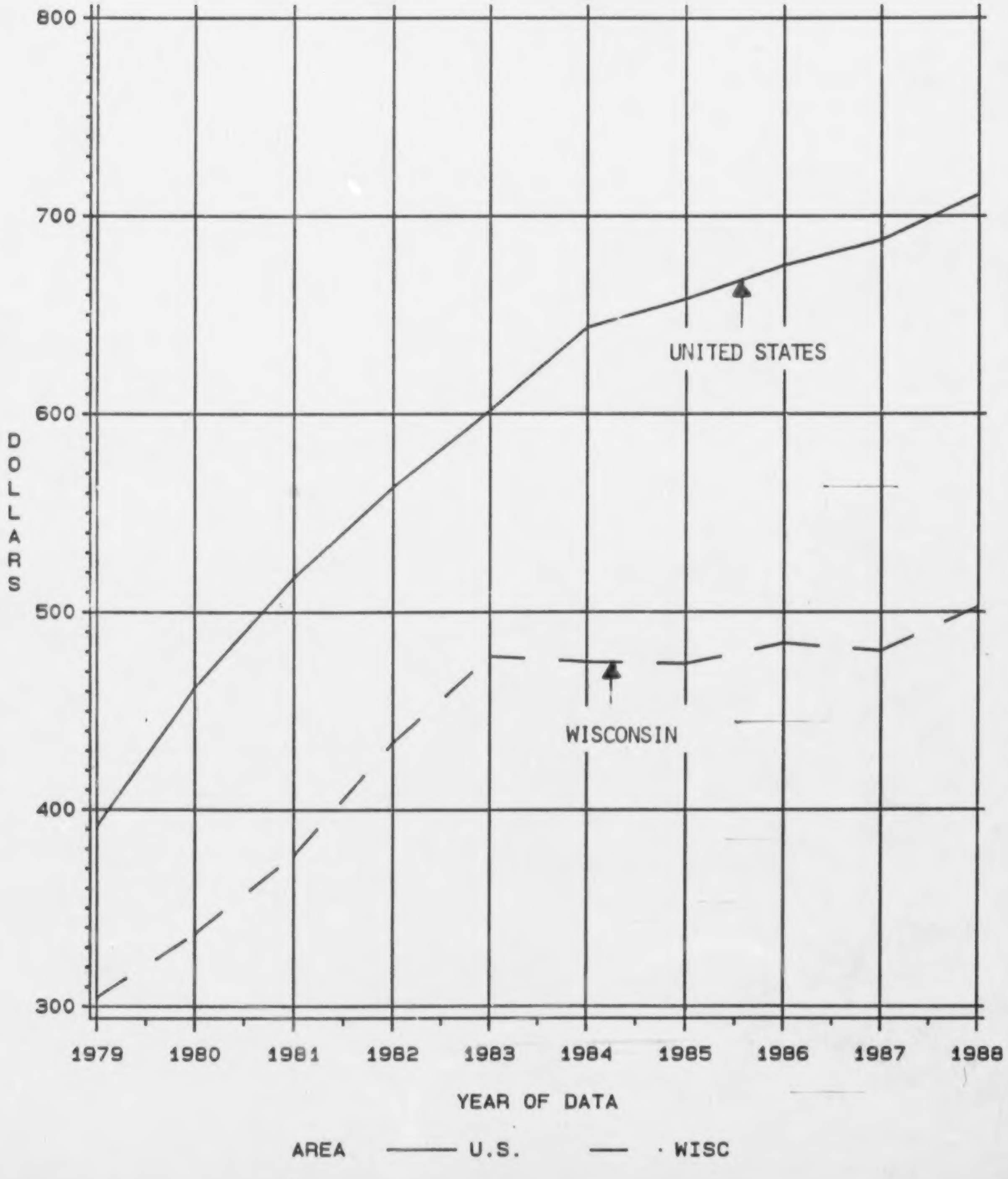
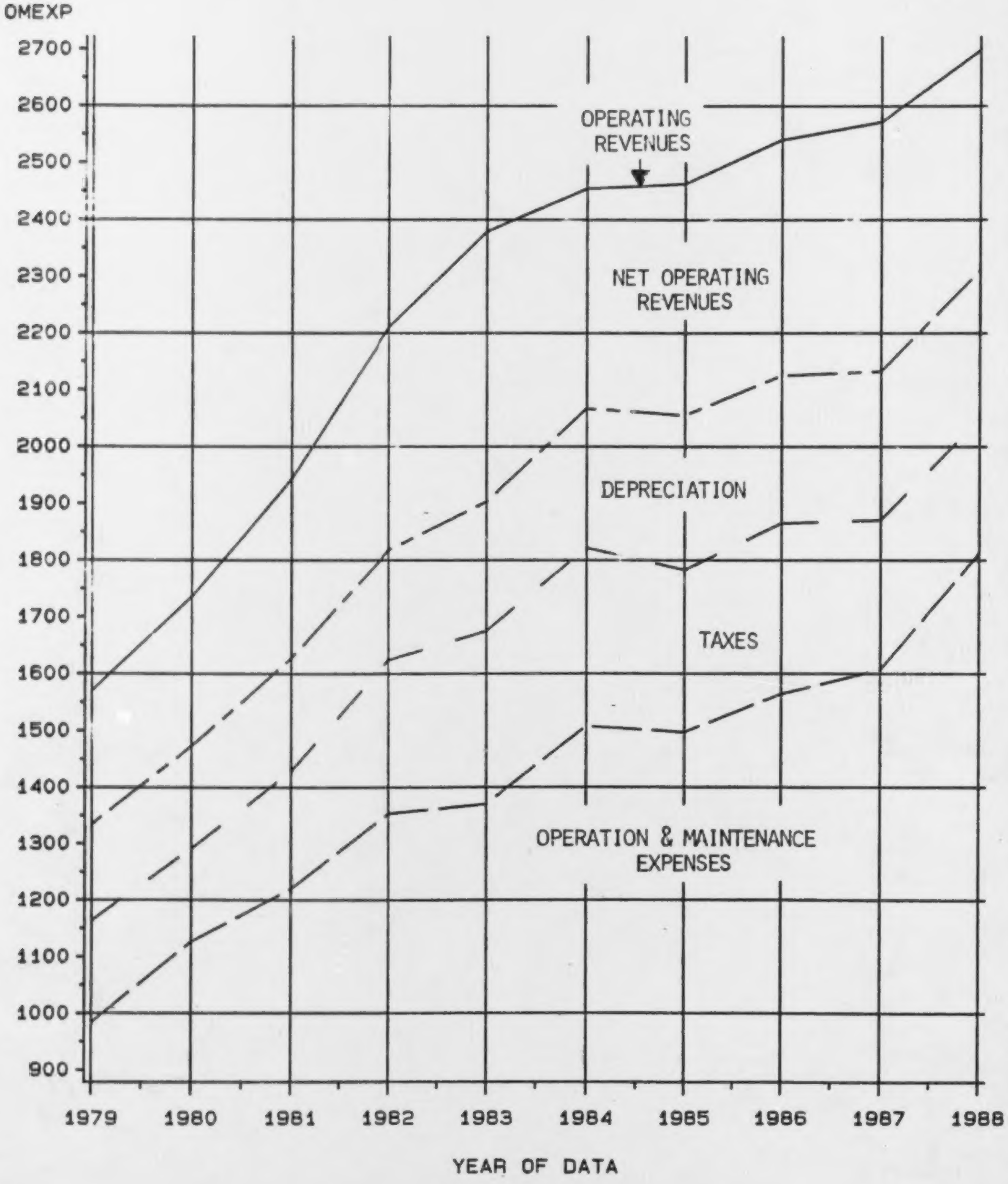


CHART 14

WISCONSIN ELECTRIC UTILITIES REVENUES AND EXPENSES



In addition to the above breakdown of operating expenses, Table 6 presents the detail of production expense on a company-wide basis. If this breakdown is related to corresponding data on generation and purchases, the following comparison of costs per megawatt hour, exclusive of fixed charges, results:

	Production Expense* Per Megawatt Hour Generated or Purchased 1988	
	Private Utilities	Municipal Utilities
Steam Plants-Nuclear Fuel	$ 14.32	$ 0.00
Steam Plants-Fossil Fuel	22.06	48.33
Hydro Electric Plants	13.45	3.41
Internal Combustion (Recip. & Turbine)	98.89	155.30
Purchased Energy	23.77	36.94

*Excludes depreciation, taxes, and return.

Kilowatt Hours Generated and Purchased; Fuel Consumed

The sources of energy of Wisconsin electric utilities are summarized in Table 8. The net generation by plants located in Wisconsin is compared below on a percentage basis over a period of ten years:

	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979
Steam-Nuclear	24.9%	27.9%	28.5%	28.3	28.2%	25.7%	30.3%	30.1%	29.7%	34.3%
Steam-Fossil	71.7	69.1	66.7	66.5	66.9	67.0	63.9	64.5	62.9	58.1
Hydro	3.2	2.9	4.8	5.2	4.8	7.1	5.6	4.8	5.0	5.1
Int. Comb.-Recip.	1/	1/	1/	1/	1/	1/	1/	1/	0.1	0.2
Int. Comb.-Turbine	0.2	0.1	1/	1/	0.1	0.2	0.2	0.6	2.3	2.3
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

During the ten years covered, fossil steam generating plants have produced a major portion of the State's electric energy, varying from a high of 71.7% in 1988 to a low of 62.9% in 1979. Privately owned utilities generated 99.2% of total energy produced by utilities in 1988.

Fuel consumption ratios over the past five years are presented below:

	1988	1987	1986	1985	1984
BTU's of Fuel Used in Nuclear Steam Plants Per kWh Generated (Net)	10,514	10,576	10,579	10,569	10,580
BTU's of Fuel Used in Fossil Steam Plants Per kWh Generated (Net)	10,897	10,894	10,926	10,516	10,939
BTU's of Fuel Used in Turbine Plants Per kWh Generated (Net)	9,578	17,926	17,967	18,185	17,954
BTU's of Fuel Used in Reciprocating Plants Per kWh Generated (Net)	16,798	12,336	5,912	9,450	11,268

1/ Less than 0.05%.

Generating Plant and Transmission Line Data

Data on the capacity of generating plants and miles of transmission pole line are presented in Table 9. The total capacity of all generating plants operated by Wisconsin utilities as of December 1988 was about 11,000 megawatts of which about 638 megawatts were in plants located outside the State. Of the capacity of plants located in Wisconsin, 15.0% is steam-nuclear, 68.1% is steam-fossil, 3.9% is hydro, 1.0% is by reciprocating engines, and 12.0% is turbine.

About 9,334 miles of transmission line were in service at the close of 1988 of which about 4,560 miles carry voltage in excess of 100,000 volts.

Data on Individual Utilities

Table 10 presents selected operating data covering the year 1988 for each Class A, B, and C private electric utility in the State and Table 11 presents similar data on each Class A, B, C and D municipal electric utility. Chart 15 shows the percentage distribution by companies of electric operating revenue from sales to ultimate consumers. Four large private utilities account for 83.7% of the total. Municipal utilities make up 8.7%.

Table 10 shows that private utilities as a group generated a large part of their energy requirements while Table 11 shows that municipal utilities purchase most of their requirements. Of the 82 individual municipal utilities listed, only 19 generated some electricity.

CHART 15

REVENUES OF WISCONSIN ELECTRIC UTILITIES IN PERCENT OF TOTAL SALES TO ULTIMATE CONSUMERS

1988

SUM OF PERCENT BY UTILITY

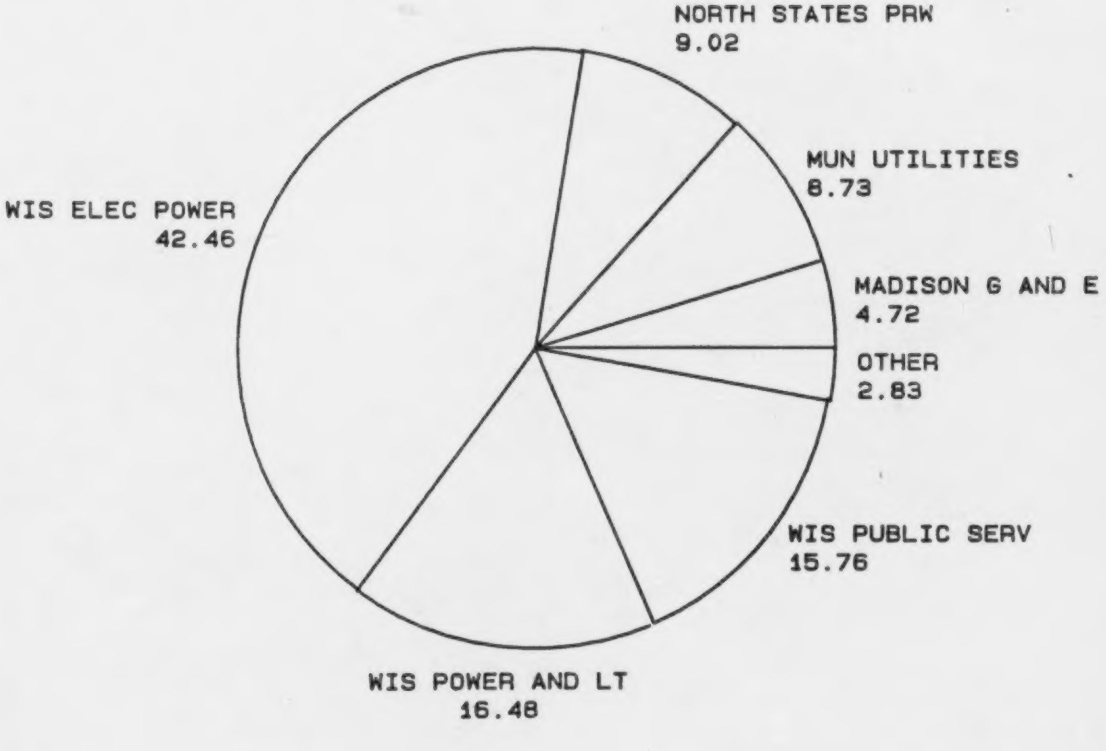


TABLE 4

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1988-1986

	1988	1987	1986
All Electric Utilities			
Operating Revenues			
Sales to Ultimate Consumers	$ 2,456,386,386	$ 2,348,090,849	$ 2,317,491,821
Sales to Other Utilities	208,726,437	193,846,624	187,716,164
Sales to Electric Cooperatives	14,781,614	14,280,874	14,054,043
Miscellaneous Revenues	18,182,869	15,742,846	20,800,722
Total Operating Revenues	$ 2,698,077,306	$ 2,571,961,193	$ 2,540,062,750
Operating Revenue Deductions			
Operation and Maintenance	$ 1,812,058,737	$ 1,606,884,609	$ 1,564,401,694
Depreciation and Amortization	262,012,459	261,565,180	260,022,458
Taxes Other than Income Taxes	119,568,500	94,078,809	107,063,303
Income Taxes	116,655,487	169,992,564	193,543,558
Total Operating Expenses	$ 2,310,295,183	$ 2,132,621,162	$ 2,125,031,013
Net Operating Revenues	$ 387,782,123	$ 439,340,031	$ 415,031,737
Private Electric Utilities			
Operating Revenues			
Sales to Ultimate Consumers	$ 2,225,726,885	$ 2,127,879,947	$ 2,097,870,167
Sales to Other Utilities	208,446,130	193,557,874	187,397,280
Sales to Electric Cooperatives	14,781,614	14,280,874	14,054,043
Miscellaneous Revenues	13,527,762	11,390,237	16,890,617
Total Operating Revenues	$ 2,462,482,391	$ 2,347,108,932	$ 2,316,212,107
Operating Revenue Expenses			
Operation and Maintenance	$ 1,606,233,230	$ 1,409,765,097	$ 1,363,815,549
Depreciation and Amortization	251,654,096	251,936,558	251,083,928
Taxes Other than Income Taxes	111,264,939	86,379,275	100,010,838
Income Taxes	116,655,487	169,992,564	193,543,558
Total Operating Expenses	$ 2,085,807,752	$ 1,918,073,494	$ 1,908,453,873
Net Operating Revenues	$ 376,674,639	$ 429,035,438	$ 407,758,234

(Continued)

TABLE 4 (Concluded)

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1988-1986

Municipal Electric Utilities	1988	1987	1986
Operating Revenues			
Sales to Ultimate Consumers	$ 230,659,501	$ 220,210,902	$ 219,621,654
Sales to Other Electric Utilities	280,307	288,750	318,884
Sales to Electric Cooperatives	0	0	0
Miscellaneous Operating Revenues	4,655,107	4,352,609	3,910,105
Total Operating Revenues	$ 235,594,915	$ 224,852,261	$ 223,850,643
Operating Revenue Expenses			
Operation and Maintenance	$ 205,825,507	$ 197,119,512	$ 200,586,145
Depreciation and Amortization	10,358,363	9,728,622	8,938,530
Taxes Other than Income Taxes	8,303,561	7,699,534	7,052,465
Total Operating Expenses	$ 224,487,431	$ 214,547,668	$ 216,577,140
Net Operating Revenues	$ 11,107,484	$ 10,304,593	$ 7,273,503

1/ Excluding out-of-state operations.

TABLE 5

SALES TO ULTIMATE CONSUMERS BY CLASS
WISCONSIN ELECTRIC UTILITIES 1/
1988-1986

All Electric Utilities	1988	1987	1986
Revenues			
Residential	$ 822,689,512	$ 773,504,459	$ 768,327,167
Commercial and Industrial	1,456,482,588	1,396,637,348	1,365,818,511
Rural	131,590,327	132,123,937	136,256,541
Public Street and Highway Lighting	28,793,191	29,303,918	29,890,493
Other Sales to Public Authorities	11,917,198	11,860,216	12,551,824
Interdepartmental Sales	4,913,570	4,660,971	4,647,284
Total Revenue from Ultimate Consumers	$2,456,386,386	$2,348,090,849	$2,317,491,820
Megawatt Hours Sold			
Residential	12,440,600	11,617,410	11,298,316
Commercial and Industrial	30,180,969	28,295,071	26,467,579
Rural	2,086,834	2,073,424	2,098,377
Public Street and Highway Lighting	389,117	404,304	413,574
Other Sales to Public Authorities	257,271	249,021	247,741
Interdepartmental Sales	98,095	93,490	89,717
Total Megawatt Hours Sold to Ultimate Consumers	45,452,886	42,732,720	40,615,304
Average Number of Customers 2/			
Residential	1,637,089	1,610,171	1,586,593
Commercial and Industrial	211,620	207,916	202,779
Rural	143,520	146,711	146,450
Public Street and Highway Lighting	4,165	4,477	4,940
Other Sales to Public Authorities	1,008	965	964
Interdepartmental Sales	96	100	105
Total Ultimate Consumers	1,997,498	1,970,340	1,941,831

(Continued)

TABLE 5 (Continued)

SALES TO ULTIMATE CONSUMERS BY CLASS
WISCONSIN ELECTRIC UTILITIES 1/
1988-1986

	1988	1987	1986
Private Electric Utilities			
Revenues			
Residential	$ 757,807,672	$ 711,717,062	$ 707,314,266
Commercial and Industrial	1,311,082,224	1,258,104,390	1,227,763,428
Rural	119,518,300	120,240,976	123,720,382
Public Street and Highway Lighting	24,946,201	25,440,684	26,126,097
Other Sales to Public Authorities	10,395,024	10,489,571	11,058,598
Interdepartmental Sales	1,977,464	1,887,264	1,887,395
Total Revenue from Ultimate Consumers	$2,225,726,885	$2,127,879,947	$2,097,870,166
Megawatt Hours Sold			
Residential	11,197,637	10,443,308	10,148,312
Commercial and Industrial	27,047,401	25,385,143	23,655,154
Rural	1,863,356	1,858,595	1,874,210
Public Street and Highway Lighting	340,322	355,883	364,574
Other Sales to Public Authorities	228,683	224,148	226,330
Interdepartmental Sales	39,282	37,472	35,881
Total Megawatt Hours Sold to Ultimate Consumers	40,716,681	38,304,549	36,304,461
Average Number of Customers 2/			
Residential	1,482,104	1,457,549	1,435,692
Commercial and Industrial	185,775	182,383	177,838
Rural	126,626	130,120	129,312
Public Street and Highway Lighting	3,700	3,701	3,682
Other Sales to Public Authorities	620	624	615
Interdepartmental Sales	7	7	8
Total Ultimate Consumers	1,798,832	1,774,384	1,747,147

(Continued)

TABLE 5 (Concluded)

SALES TO ULTIMATE CONSUMERS BY CLASS
WISCONSIN ELECTRIC UTILITIES 1/
1988-1986

Municipal Electric Utilities	1988	1987	1986
Revenues			
Residential	$ 64,881,840	$ 61,787,397	$ 61,012,901
Commercial and Industrial	145,400,364	138,532,958	138,055,083
Rural	12,072,027	11,882,961	12,536,159
Public Street and Highway Lighting	3,846,990	3,863,234	3,764,396
Other Sales to Public Authorities	1,522,174	1,370,645	1,493,226
Interdepartmental Sales	2,936,106	2,773,707	2,759,889
Total Revenue from Ultimate Consumers	$230,659,501	$220,210,902	$219,621,654
Megawatt Hours Sold			
Residential	1,242,963	1,174,102	1,150,004
Commercial and Industrial	3,133,568	2,909,928	2,812,425
Rural	223,478	214,829	224,167
Public Street and Highway Lighting	48,795	48,421	49,000
Other Sales to Public Authorities	28,588	24,873	21,411
Interdepartmental Sales	58,813	56,018	53,836
Total Megawatt Hours Sold to Ultimate Consumers	4,736,205	4,428,171	4,310,843
Average Number of Customers 2/			
Residential	154,985	152,622	150,901
Commercial and Industrial	25,845	25,533	24,941
Rural	16,894	16,591	17,138
Public Street and Highway Lighting	465	776	1,258
Other Sales to Public Authorities	388	341	349
Interdepartmental Sales	89	93	97
Total Ultimate Consumers	198,666	195,956	194,684

1/ Excluding out-of-state operations.

2/ Heating, cooking and yard lighting customers on separate rates are not included in customer data, as they would be duplications.

TABLE 6

COMPARATIVE STATEMENT OF OPERATION AND MAINTENANCE EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1988-1986

All Electric Utilities	1988	1987	1986
Production Expense-Total Company			
Steam-Nuclear Fuel	$ 164,125,155	$ 147,695,561	$ 139,737,284
Steam-Fossil Fuel	732,915,663	619,237,659	651,786,455
Hydraulic	18,283,149	16,309,942	16,080,458
Int. Comb.-Recip. and Turbine	11,050,158	6,418,777	6,874,329
Purchases or Net Interchanges	420,386,221	382,252,856	357,861,819
Other Power Supply	8,227,390	6,407,531	6,163,572
Total Production Expense	$1,354,987,736	$1,178,322,326	$1,178,503,917
Amount Applicable to Out-of-State Sales	9,008,828	5,397,121	14,261,997
Amount Applicable to Wisconsin Sales	$1,345,978,908	$1,172,925,205	$1,164,241,920
Operation and Maintenance - Wisconsin Only			
Production	$1,345,978,908	$1,172,925,205	$1,164,241,920
Transmission 2/	19,604,518	18,361,675	19,808,541
Distribution 2/	149,440,367	144,069,338	138,644,498
Customer Accounts	58,393,120	61,126,077	59,846,588
Sales Promotion 3/	1,414,036	1,176,560	878,916
Customer Service	50,567,471	46,579,595	27,473,282
Administrative and General	186,660,317	162,646,159	153,507,949
Total	$1,812,058,737	$1,606,884,609	$1,564,401,694
Private Electric Utilities			
Production Expense - Total Company			
Steam-Nuclear Fuel	$ 164,125,155	$ 147,695,561	$ 139,737,284
Steam-Fossil Fuel	720,399,536	606,593,495	638,040,175
Hydraulic	17,870,456	15,932,422	15,685,370
Int. Comb.-Recip. and Turbine	10,237,452	5,793,638	6,216,259
Purchases or Net Interchanges	251,475,711	221,401,158	193,618,563
Other Power Supply	8,018,324	6,212,529	5,966,851
Total Production Expense	$1,172,126,634	$1,003,628,803	$ 999,264,502
Amount Applicable to Out-of-State Sales	9,008,828	5,397,121	14,261,997
Amount Applicable to Wisconsin Sales	$1,163,117,806	$ 998,231,682	$ 985,002,505
Operation and Maintenance - Wisconsin Only			
Production	$1,163,117,806	$ 998,231,682	$ 985,002,505
Transmission 2/	19,355,673	18,153,380	19,632,622
Distribution 2/	141,183,065	136,148,896	130,880,164
Customer Accounts	55,036,804	57,854,539	56,605,114
Sales Promotion	1,315,625	1,145,098	864,473
Customer Service	50,561,705	46,575,971	27,470,182
Administrative and General	175,662,552	151,655,531	143,360,489
Total	$1,606,233,230	$1,409,765,097	$1,363,815,549

TABLE 6 (Concluded)

COMPARATIVE STATEMENT OF OPERATION AND MAINTENANCE EXPENSE
WISCONSIN ELECTRIC UTILITIES 1/
1988-1986

Municipal Electric Utilities	1988	1987	1986
Production Expense			
Steam-Fossil Fuel	$ 12,516,127	$ 12,644,164	$ 13,746,280
Hydraulic	412,693	377,520	395,088
Int. Com.-Recip. and Turbine	812,706	625,139	658,070
Purchases or Net Interchanges	168,910,510	160,851,698	164,243,256
Other Power Supply	209,066	195,002	196,721
Total Production Expense	$ 182,861,102	$ 174,693,523	$ 179,239,415
Transmission 2/	248,845	208,295	175,919
Distribution 2/	8,257,302	7,920,442	7,764,334
Customer Accounts	3,356,316	3,271,538	3,241,474
Sales 3/	104,177	35,086	17,543
Administrative and General	10,997,765	10,990,628	10,147,460
Total	$ 205,825,507	$ 197,119,512	$ 200,586,145

1/ Out-of-state operations of Wisconsin Utilities are not included except in detail of production expenses, as indicated.

2/ Transmission and distribution expenses are combined in the Class D report forms. These utilities are assumed to have no transmission expense.

3/ Includes customer service expense for municipal utilities.

TABLE 7

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1988-1986

All Electric Utilities	1988	1987	1986
MWh Sold to Ultimate Customers (Wisconsin Only)	45,452,886	42,732,720	40,615,304
MWh Sold to Other Electric Utilities	5,820,631	5,331,291	4,893,748
MWh sold to Electric Coops	417,665	405,780	382,951
Total MWh Sold in Wisconsin 1/	51,691,182	48,469,791	45,892,003
MWh Used by Utilities	132,133	120,752	122,465
Total MWh Sold & Used in Wisconsin 1/	51,823,315	48,590,543	46,014,468
MWh Sold Out of State			
Sales to Ultimate Consumers	2,995,127	610,912	585,340
Sales to Electric Utilities and Cooperatives	1,072,939	1,258,568	1,114,032
Total MWh Sold Out of State	4,068,066	1,869,480	1,699,372
MWh Used by Utilities Out of State	1,082	3,209	6,630
Total MWh Sold & Used Out of State	4,069,148	1,872,689	1,706,002
Total MWh Sold & Used	55,892,463	50,463,232	47,720,470
MWh Unaccounted for	3,368,082	3,096,545	2,964,303
Total MWh Generated and Purchased Purchased 1/	59,260,545	53,559,777	50,684,773

(Continued)

TABLE 7 (Continued)

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1988-1986

	1988	1987	1986
Private Electric Utilities			
MWh Sold to Ultimate Customers (Wisconsin Only)	40,716,681	38,304,549	36,304,461
MWh Sold to Other Electric Utilities	5,819,732	5,329,448	4,892,480
MWh Sold to Electric Cooperatives	417,665	405,780	382,951
Total MWh Sold in Wisconsin 1/	46,954,078	44,039,777	41,579,892
MWh Used by Utilities	121,248	111,881	106,645
Total MWh Sold & Used in Wisconsin 1/	47,075,326	44,151,658	41,686,537
MWh Sold Out of State			
Sales to Ultimate Consumers	2,995,127	610,912	585,340
Sales to Electric Utilities & Cooperatives	1,072,939	1,258,568	1,114,032
Total MWh Sold Out of State	4,068,066	1,869,480	1,699,372
MWh Used by Utilities Out of State	1,082	3,209	6,630
Total MWh Sold & Used Out of State	4,069,148	1,872,689	1,706,002
Total MWh Sold and Used	51,144,474	46,024,347	43,392,539
MWh Unaccounted for	3,158,343	2,892,575	2,761,517
Total MWh Generated and Purchased 1/	54,302,817	48,916,922	46,154,056

(Continued)

TABLE 7 (Concluded)

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1988-1986

	1988	1987	1986
Municipal Electric Utilities			
MWh Sold to Ultimate Customers (Wisconsin Only)	4,736,205	4,428,171	4,310,843
MWh Sold to Other Electric Utilities	899	1,843	1,268
MWh Sold to Electric Coops.	0	0	0
Total MWh Sold in Wisconsin 1/	4,737,104	4,430,014	4,312,111
MWh Used by Utilities	10,885	8,871	15,820
Total MWh Sold or Used in Wisconsin 1/	4,747,989	4,438,885	4,327,931
MWh Sold Out of State			
Sales to Ultimate Consumers	0	0	0
Sales to Electric Utilities & Cooperatives	0	0	0
Total MWh Sold Out of State	0	0	0
MWh Used by Utilities Out of State	0	0	0
Total MWh Sold and Used Out of State	0	0	0
Total MWh Sold and Used	4,747,989	4,438,885	4,327,931
MWh Unaccounted for	209,739	203,970	202,786
Total MWh Generated and Purchased 1/	4,957,728	4,642,855	4,530,717

1/ To avoid double counting subtract "MWh Sold to Other Utilities".

TABLE 8

MEGAWATT HOURS GENERATED AND PURCHASED
WISCONSIN ELECTRIC UTILITIES
1988-1986

All Electric Utilities	1988	1987	1986
Net Generation in Wisconsin			
Steam - Nuclear Fuel	11,464,455	11,178,886	11,039,856
Steam - Fossil Fuel	30,099,937	27,696,375	25,905,900
Hydraulic	1,063,411	1,138,524	1,847,361
Internal Combustion - Recip.	6,542	3,614	3,849
Internal Combustion - Turbine	102,212	42,015	46,508
Total	42,736,557	40,059,414	38,843,474
Net Generation Outside Wisconsin by Wisconsin Companies			
Steam - Fossil Fuel	2,817,756	4/	4/
Hydraulic	386,204	354,159	436,352
Total	3,203,960	354,159	436,352
Total Megawatt Hours Generated			
Steam - Nuclear Fuel	11,464,455	11,178,886	11,039,856
Steam - Fossil Fuel	32,917,693	27,696,375	25,905,900
Hydraulic	1,449,615	1,492,683	2,283,713
Internal Combustion - Recip.	6,542	3,614	3,849
Internal Combustion - Turbine	102,212	42,015	46,508
Total	45,940,517	40,413,573	39,279,826
Megawatt Hours Purchased Plus Net Interchanges			
From Wisconsin Electric Utils. 2/	5,898,722	5,315,444	8,845,408
From Out-of-State Elec. Utils. 3/	0	4,188,213	0
From Electric Cooperatives	2,045,321	1,977,167	1,634,381
From Other Non-Utility Companies	7,209,508	1,665,379	925,158
Total	15,153,551	13,146,204	11,404,947
Total Megawatt Hours Generated and Purchased 2/	61,094,068	53,559,777	50,684,773
Tons of Coal Used in Steam Plants	18,536,308	15,530,512	12,234,977
Gallons of Fuel Oil Used in Steam Plants	3,921,876	4,208,820	5,585,748
Therms of Natural Gas Used in Steam Plants	19,892,349	9,859,508	10,645,370
Tons of Wood in Steam Plants	282,508	247,498	186,552
Gallons of Fuel Oil Used in Internal Combustion-Recip. Plants	354,287	115,468	184,101
Therms of Natural Gas Used in Internal Combustion-Recip. Plants	206,747	98,050	444,400
Gallons of Fuel Oil Used in Internal Combustion-Turbine Plts.	6,308,010	2,175,978	4,076,772
Therms of Natural Gas Used in Internal Combustion-Turbine Plts.	7,350,958	4,757,116	2,577,164

TABLE 8 (Continued)

MEGAWATT HOURS GENERATED AND PURCHASED WISCONSIN ELECTRIC UTILITIES 1988-1986

Private Electric Utilities 1/	1988	1987	1986
Net Generation in Wisconsin			
Steam - Nuclear Fuel	11,464,455	11,178,886	11,039,856
Steam - Fossil Fuel	29,840,976	27,449,786	25,648,191
Hydraulic	942,413	1,031,419	1,725,266
Internal Combustion - Recip.	1,749	541	747
Internal Combustion - Turbine	101,772	41,650	46,322
Total	42,351,365	39,702,282	38,460,382
Net Generation Outside Wisconsin by Wisconsin Companies			
Steam - Fossil Fuel	2,817,756	4/	4/
Hydraulic	386,204	354,159	436,352
Total	3,203,960	354,159	436,352
Total Megawatt Hours Generated			
Steam - Nuclear Fuel	11,464,455	11,178,886	11,039,856
Steam - Fossil Fuel	32,658,732	27,449,786	25,648,191
Hydraulic	1,328,617	1,385,578	2,161,618
Internal Combustion - Recip.	1,749	541	747
Internal Combustion - Turbine	101,772	41,650	46,322
Total	45,555,325	40,056,441	38,896,734
Megawatt Hours Purchased Plus Net Interchanges			
From Wisconsin Electric Utilities 2/	1,472,156	1,163,537	4,822,356
From Out-of-State Elec. Utils. 3/	0	4,188,213	0
From Electric Cooperatives	1,900,840	1,846,395	1,510,389
From Other Non-Utility Companies	7,208,019	1,662,336	924,577
Total	10,581,015	8,860,481	7,257,322
Total Megawatt Hours Generated and Purchased 2/	56,136,340	48,916,922	46,154,056
Tons of Coal Used in Steam Plants	18,364,491	15,364,673	12,047,798
Gallons of Fuel Oil Used in Steam Plants	3,921,876	4,208,820	5,585,748
Therms of Natural Gas Used in Steam Plants	19,892,349	9,859,508	10,645,370
Tons of Wood in Steam Plants	282,508	247,498	186,552
Gallons of Fuel Oil Used in Internal Combustion-Recip. Plants	149,856	51,996	63,462
Therms of Natural Gas Used in Internal Combustion-Recip. Plants	0	0	442,490
Gallons of Fuel Oil Used in Internal Combustion-Turbine Plts.	6,260,730	2,162,370	4,076,772
Therms of Natural Gas Used in Internal Combustion-Turbine Plts.	7,343,910	4,743,646	2,573,626

TABLE 8 (Concluded)

MEGAWATT HOURS GENERATED AND PURCHASED
WISCONSIN ELECTRIC UTILITIES
1988-1986

Municipal Electric Utilities	1988	1987	1986
Net Generation in Wisconsin			
Steam - Fossil Fuel	258,961	246,589	257,709
Hydraulic	120,998	107,105	122,095
Internal Combustion - Recip.	4,793	3,073	3,102
Internal Combustion - Turbine	440	365	186
Total	385,192	357,132	383,092
Megawatt Hours Purchased plus Net Interchanges			
From Wisconsin Electric Utils.2/	4,426,566	4,151,908	4,023,052
From Electric Cooperatives	144,481	130,772	123,992
From Other Non-Utility Companies	1,489	3,043	581
Total	4,572,536	4,285,723	4,147,625
Total Megawatt Hours Generated and Purchased 2/	4,957,728	4,642,855	4,530,717
Tons of Coal Used in Steam Plants	171,817	165,839	234,427
Gallons of Fuel Oil Used in Steam Plants	0	0	0
Therms of Natural Gas Used in Steam Plants	0	0	0
Gallons of Fuel Oil Used in Internal Combustion-Recip. Plants	204,431	63,472	120,639
Therms of Natural Gas Used in Internal Combustion-Recip. Plants	206,747	98,050	1,910
Gallons of Fuel Oil Used in Internal Combustion-Turbine Plants	47,280	13,608	0
Therms of Natural Gas Used in Internal Combustion-Turbine Plants	7,048	13,470	3,538

1/ Experimental generation using windmills and photo voltaics is being done by some utilities. These plants will be included in the Bulletin if and when they produce a significant amount of commercial power.

2/ Energy included in "Purchased from Wisconsin Electric Utilities" is also included in the generation figures. Therefore, to avoid double counting, you should subtract "Purchased from Wisconsin Electric Utilities" from the "Total Megawatt Hours Generated and Purchased" figure.

3/ Includes purchases delivered in Wisconsin or at state line.

4/ Wisconsin Electric Power Co. purchased from Upper Peninsula Power Co. on 12/87.

TABLE 9

GENERATING PLANT AND TRANSMISSION LINE DATA
WISCONSIN ELECTRIC UTILITIES
1988-1986

Capacity of Generators in Kilowatts	1988	1987	1986
All Plants in Wisconsin			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	7,049,128	7,048,528	7,052,828
Hydraulic	403,482	354,342	354,342
Internal Combustion - Recip.	99,175	98,455	108,627
Internal Combustion - Turbine	1,257,450	1,257,450	1,251,950
Total	10,349,917	10,299,457	10,308,429
Private Utility Plants in Wisconsin			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	6,915,948	6,911,348	6,907,648
Hydraulic	378,650	335,710	335,710
Internal Combustion-Recip.	24,640	24,640	24,640
Internal Combustion-Turbine	1,237,450	1,237,450	1,231,950
Total	10,097,370	10,049,830	10,040,630
Municipal Utility Plants in Wisconsin			
Steam - Fossil Fuel	133,180	137,180	145,180
Hydraulic	24,832	18,632	18,632
Internal Combustion-Recip.	74,535	73,815	83,987
Internal Combustion-Turbine	20,000	20,000	20,000
Total	252,547	249,627	267,799
Plants Located Outside Wisconsin Operated by Wisconsin Utils. 1/			
Steam - Fossil Fuel	537,862	2/	2/
Hydraulic	99,990	99,990	99,990
Total	637,852	99,990	99,990
Total Plants Operated by Wisconsin Utilities			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	7,586,990	7,048,528	7,052,828
Hydraulic	503,472	454,332	454,332
Internal Combustion-Recip.	99,175	98,455	108,627
Internal Combustion-Turbine	1,257,450	1,257,450	1,251,950
Total	10,987,769	10,399,447	10,408,419
Miles of Transmission Pole or Tower (Including Out-of-State)			
Over 100,000 Volts	4,560	4,521	4,412
Less than 100,000 Volts	4,774	4,807	4,856

1/ Out-of-State plants are all owned by private electric utilities.

2/ Wisconsin Electric Power Co. purchased from Upper Penincula Power Co. on 12/87.

TABLE 10

CONDENSED SUMMARY OF 1988 OPERATIONS
INDIVIDUAL PRIVATE ELECTRIC UTILITIES 1/

Utilities	Operating Revenues 2/	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Net Operating Revenue	2/ Total MWh Sold	2/3/ Ave. No. of Consumers	4/ MWh Generated	4/ MWh Purchased
Class A, B, and C										
Consolidated Water Power Co.	$ 36,036,409	$ 33,809,257	$ 875,133	$ 243,317	$ 254,373	$ 854,329	978,788	1,010	96,925	889,716
Dahlberg Light & Power Co.	4,679,317	3,397,859	365,180	133,931	168,323	614,024	59,330	8,122	1,752	64,978
Madison Gas and Electric Co.	127,351,226	76,160,728	16,706,431	5,798,418	4,779,298	23,906,351	2,211,746	108,233	2,111,070	224,179
North Central Power Co.	1,675,440	1,127,338	127,989	53,162	96,624	270,327	21,301	3,145	6,563	18,057
Northern States Power Co.	243,425,604	175,670,129	20,980,327	9,562,555	9,476,998	27,735,595	4,821,836	183,477	764,652	4,658,016 4/
Northwestern Wisconsin Electric Co.	7,202,681	5,067,579	664,346	207,814	250,829	1,012,113	111,758	10,216	9,458	118,299 4/
Pioneer Power & Light Co.	1,194,469	994,761	59,347	24,639	25,146	90,576	19,501	1,427	0	21,043
Superior Water, Light & Power Co.	24,905,356	20,364,731	906,264	979,693	563,422	2,091,246	540,298	12,204	221	564,301
Westfield Milling & Electric Light Co.	542,911	462,119	25,482	4,936	7,254	43,120	8,349	595	0	8,800
Wisconsin Electric Power Co.	1,145,464,425	742,727,953	114,281,183	56,718,445	66,453,027	165,283,817	20,557,485	840,428	24,098,855	1,347,667 4/
Wisconsin Power and Light Co.	444,757,739	270,301,488	53,607,916	20,491,831	18,933,415	81,423,089	8,986,716	323,310	8,489,699	1,311,568 4/
Wisconsin Public Service Corp.	425,246,814	276,149,288	43,054,498	17,046,198	15,646,778	73,350,052	8,636,970	306,756	8,142,607	1,354,391 4/
Grand Total	$2,462,482,391	$1,606,233,230	$251,654,096	$111,264,939	$116,655,487	$376,674,639	46,954,078	1,798,923	43,721,802	10,581,015

1/ Data included in this table includes Wisconsin operations only, except where noted.
2/ Includes Interdepartmental Sales and Sales for Resale.
3/ Excluding Off-Peak Water Heating and Area Lighting Customers.
4/ Total company operations are represented in data on generation and purchases. Companies operating outside Wisconsin are: Northern States Power Co., Northwestern Wisconsin Electric Co., Wisconsin Electric Power Co., Wisconsin Power and Light Company and Wisconsin Public Service Corp. Where power is interchanged, the net figure is added to MWh purchased.

TABLE 11

CONDENSED SUMMARY OF 1988 OPERATIONS
INDIVIDUAL MUNICIPAL ELECTRIC UTILITIES 1/

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Net Operating Revenue	2/ Total MWh Sold	2/3/ Ave. No. of Consumers	MWh Generated	MWh Purchased
Class A and B									
Cedarburg	$ 5,291,577	$ 4,675,515	$ 183,604	$ 162,787	$ 269,671	95,856	4,816	0	100,786
Jefferson	5,879,147	5,480,936	118,764	98,122	181,325	121,723	2,944	0	128,761
Kaukauna	19,048,516	15,362,328	819,218	668,228	2,198,742	525,720	9,192	113,893	435,156
Manitowoc	21,187,515	16,755,346	1,058,312	913,904	2,459,953	390,859	14,991	171,398	235,488
Marshfield	13,782,981	12,808,198	541,045	530,254	(96,516)	275,421	10,958	55,638	232,653
Menasha	7,362,183	6,114,503	581,223	513,318	153,139	130,554	6,580	33,961	98,508
New London	6,742,297	6,115,868	154,256	191,455	280,718	143,827	3,156	0	147,595
Oconomowoc	7,105,597	6,055,965	292,100	234,545	522,987	134,060	5,787	0	137,934
Plymouth	6,395,929	5,653,629	311,442	218,260	212,598	130,148	5,477	0	140,880
Rice Lake	5,230,401	4,708,807	235,093	167,460	119,041	100,718	4,246	0	106,834
River Falls	4,362,509	3,676,317	262,428	199,561	224,203	77,272	3,718	2,375	77,448
Shawano	7,267,229	6,424,455	241,602	234,630	366,542	156,433	4,395	0	159,834
Sheboygan Falls	5,562,356	5,232,435	168,625	107,094	54,202	139,633	2,870	0	143,477
Stoughton	4,630,966	4,057,382	172,615	136,198	264,771	88,597	5,752	0	94,105
Sturgeon Bay	6,511,720	5,503,124	400,204	268,266	340,126	112,995	6,659	0	120,240
Sun Prairie	5,222,148	4,619,721	236,865	174,131	191,431	110,682	5,822	0	111,467
Two Rivers	3,973,442	3,748,546	143,423	131,065	(49,592)	74,451	5,672	0	80,174
Waterloo	2,294,575	2,129,721	52,908	52,008	59,938	46,836	1,350	0	49,033
Waupun	2,918,928	2,674,429	95,577	86,924	61,998	62,520	3,384	0	65,341
Wisconsin Rapids	10,080,099	8,873,077	429,578	397,322	380,122	188,156	10,731	0	196,974
Subtotal	$150,850,115	$130,670,302	$ 6,498,882	$ 5,485,532	$ 8,195,399	3,106,461	118,727	377,265	2,862,688
Class C									
Algoma	1,812,202	1,745,640	59,302	62,718	(55,458)	34,529	1,844	0	36,378
Arcadia	2,005,272	1,488,443	169,407	122,672	224,750	39,342	1,128	741	40,505
Argyle	264,717	247,897	18,693	12,142	(14,015)	6,407	445	274	6,449
Bangor	1,607,612	1,442,829	66,484	59,782	38,517	28,342	1,407	0	30,216
Barron	1,665,279	1,450,652	108,145	67,661	38,821	31,312	1,562	319	33,217
Belmont	307,364	260,130	14,851	7,678	24,705	5,775	418	0	5,950
Benton	290,194	228,357	30,592	20,892	10,353	4,587	448	0	4,854
Black Earth	690,248	591,650	48,077	32,163	18,358	11,323	893	0	11,669
Black River Falls	2,170,735	1,990,319	80,293	88,483	11,640	42,276	2,352	2,732	41,390
Bloomer	1,938,527	1,913,793	60,013	39,096	(74,375)	43,202	1,650	0	45,016

TABLE 11 (Continued)

CONDENSED SUMMARY OF 1988 OPERATIONS
INDIVIDUAL MUNICIPAL ELECTRIC UTILITIES 1/

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Net Operating Revenue	2/ Total MWh Sold	2/3/ Ave. No. of Consumers	MWh Generated	MWh Purchased
Boscobel	$ 1,450,953	$ 1,201,948	$ 90,337	$ 71,212	$ 87,456	26,217	1,582	0	27,989
Brodhead	1,443,742	1,203,902	63,355	45,069	131,416	27,149	1,606	0	28,662
Cadott	585,580	529,366	26,812	14,830	14,572	10,154	654	0	10,872
Cashton	290,885	266,329	23,770	17,519	(16,733)	6,108	462	88	6,324
Centuria	246,181	237,851	6,692	5,167	(3,529)	4,393	391	0	4,759
Clintonville	3,152,923	2,827,599	99,120	80,804	145,400	54,412	2,446	0	57,191
Columbus	2,252,023	1,977,242	96,479	76,946	101,356	44,893	2,134	0	48,996
Cornell	661,891	585,107	25,959	23,182	27,643	11,794	783	0	12,291
Cuba City	688,065	577,297	41,935	22,492	46,341	12,380	903	0	13,435
Cumberland	1,760,053	1,288,030	189,818	123,057	159,148	29,667	1,180	491	31,290
Eagle River	1,311,077	1,123,537	56,969	45,482	85,089	22,857	1,066	0	23,712
Elkhorn	3,478,558	3,048,987	161,288	111,220	157,063	63,406	2,649	0	66,722
Elroy	667,774	593,894	54,439	32,493	(13,052)	14,845	784	(203)	15,922
Evansville	2,151,417	1,997,394	67,012	59,803	27,208	43,037	2,259	0	45,485
Fennimore	1,164,335	1,009,664	63,688	41,828	49,155	22,414	1,169	116	23,626
Florence	515,997	411,888	42,013	24,285	37,811	8,289	854	0	8,951
Gresham	556,294	508,402	50,656	46,875	(49,639)	9,296	916	2,854	7,389
Hartford	3,770,918	3,418,131	95,737	110,593	146,457	69,624	3,029	0	72,561
Hazel Green	329,003	302,783	14,848	9,464	1,908	5,861	528	0	6,674
Hustisford	802,164	689,215	58,637	41,722	12,590	14,305	1,074	0	15,392
Juneau	1,223,685	1,032,685	65,360	46,546	79,094	24,565	838	0	25,452
Kiel	2,200,967	2,032,481	77,233	51,358	39,895	45,492	1,674	0	47,770
LaFarge	292,289	223,811	16,215	12,976	39,287	4,870	592	0	5,194
Lake Mills	2,574,866	2,375,067	95,549	77,530	26,720	50,018	2,691	0	50,347
Lodi	852,874	724,344	52,160	34,182	42,188	15,922	1,088	0	16,627
Mazomanie	443,039	405,010	29,633	15,960	(7,564)	7,871	629	0	8,302
Medford	3,861,078	3,526,458	108,682	88,163	137,775	78,911	2,686	0	81,864
Mount Horeb	1,834,893	1,550,217	131,414	74,078	79,184	35,664	2,075	0	37,148
Muscoda	988,821	839,880	48,313	37,451	63,177	17,026	953	96	18,810
New Glarus	769,760	708,763	20,268	17,340	23,389	15,996	935	0	16,829

TABLE 11 (Concluded)

CONDENSED SUMMARY OF 1988 OPERATIONS
INDIVIDUAL MUNICIPAL ELECTRIC UTILITIES 1/

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Net Operating Revenue	2/ Total MWh Sold	2/3/ Ave. No. of Consumers	MWh Generated	MWh Purchased
New Holstein	$ 2,945,954	$ 2,776,416	$ 97,557	$ 68,521	$ 3,460	57,599	2,054	0	59,952
New Lisbon	691,267	546,197	72,000	46,296	26,774	13,902	734	181	14,115
New Richmond	2,425,657	2,240,819	79,129	70,910	34,799	47,787	2,395	0	51,359
Oconto Falls	1,213,709	1,107,068	39,452	34,614	32,585	22,463	1,242	0	23,316
Pardeeville	734,372	686,496	34,132	22,268	(8,524)	15,069	959	181	15,730
Prairie du Sac	1,472,751	1,243,353	63,148	41,217	125,033	27,777	1,060	0	28,262
Princeton	595,045	494,497	34,802	17,090	48,656	10,211	803	0	10,898
Reedsburg	4,730,046	4,367,692	145,673	116,457	100,224	109,230	2,820	0	113,875
Richland Center	3,328,429	2,919,126	157,611	83,005	168,687	64,964	2,688	0	68,435
Sauk City	1,339,683	1,163,324	52,624	35,497	88,238	26,787	1,421	0	27,376
Shullsburg	470,288	414,838	25,972	21,439	8,039	8,653	698	0	9,191
Slinger	923,794	835,206	31,568	20,533	36,487	16,654	850	0	17,780
Spooner	1,259,765	1,205,757	36,118	31,390	(13,500)	24,310	1,434	0	26,007
Stratford	528,190	480,088	12,923	8,899	26,280	9,055	681	0	9,645
Trempealeau	468,900	416,239	15,808	8,783	28,070	8,689	742	0	9,290
Viola	217,375	182,353	21,243	13,512	267	4,027	394	33	4,280
Waunakee	2,084,541	1,814,766	114,619	68,562	86,594	40,555	2,254	0	42,803
Westby	840,279	763,593	35,185	24,057	17,444	16,066	914	0	16,988
Whitehall	1,067,019	971,709	43,486	36,298	15,526	18,886	837	0	21,360
Wisconsin Dells	1,878,463	1,550,093	91,313	59,139	177,918	34,206	1,669	0	37,053
Wonewoc	286,491	274,816	10,415	5,832	(4,572)	6,251	458	0	6,678
Subtotal	$ 84,576,273	$ 75,031,428	$ 3,845,026	$ 2,807,233	$ 2,892,586	1,627,532	79,885	7,903	1,706,623
Class D - Merrillan	168,527	123,777	14,455	10,796	19,499	3,111	288	24	3,225
Grand Total	$ 235,594,915	$ 205,825,507	$ 10,358,363	$ 8,303,561	$11,107,484	4,737,244	198,672	385,192	4,572,536

1/ Data included in this table includes Wisconsin operations only, except where noted.

2/ Includes Interdepartmental Sales and Sales for Resale.

3/ Excluding Off-Peak Water Heating and Area Lighting Customers.

GAS UTILITY SUMMARY

Comparative statistics of the gas utility industry in Wisconsin for the three year period 1988-1986 are presented in this section. The following tables and charts deal with gas utility operations:

Table 12 - Comparative Statement of Revenues and Expenses, 1988-1986.
Table 13 - Sales to Ultimate Consumers by Classes, 1988-1986.
Table 14 - Operating and Plant Statistics, 1988-1986
Table 15 - Condensed Summary of 1988 Operations - Individual Utilities

Chart 16 - Comparison of Revenues and Expenses, Wisconsin Gas Utilities, 1979 -1988.
Chart 17 - Residential Gas Spaceheating Customers Average Annual Use, 1979-1988
Chart 18 - Residential Gas Spaceheating Customers Revenue per Therm, 1979-1988.
Chart 19 - Residential Gas Spaceheating Customers Average Annual Bill, 1979-1988.
Chart 20 - Revenue of Individual Gas Utilities, Percent of Total Sales to Ultimate Consumers, 1988.

Gas Utility Revenues and Expenses

Table 12 and Chart 16 show that gas utility revenues in 1988 were up about 11.48% from the previous year. Expenses were up 9.67% during the same period. Therms sold to ultimate consumers increased 12.76% and the number of ultimate (retail) consumers increased 2.13%.

Sales to Ultimate Consumers

Table 13 summarizes sales to ultimate consumers. Percentage changes in 1988 by principle classes of service are given below:

	% Change From 1987 to 1988		
	Revenues	Therms Sold	Number of Customers
Residential - General	0.20 %	1.29 %	(3.06)%
Residential - Space Heating	16.10	17.49	2.47
Commercial and Industrial - Firm	(2.95)	(1.95)	(1.45)
Commercial and Industrial - Interr.	12.28	13.12	3.37
Commercial and Industrial - Sp. Htg.	5.23	3.96	9.74
Total Sales to Ultimate Consumers	12.47 %	12.76 %	2.13 %

The number of residential space heating customers rose 2.47% during 1988. Since many of these customers formerly took service as residential general customers, a decline occurred in the number served in that classification. Commercial and industrial firm customers decreased by (3.06)% while commercial and industrial space heating and interruptible customers increased by 3.37% and 9.74% respectively.

CHART 16

WISCONSIN GAS UTILITIES REVENUES AND EXPENSES

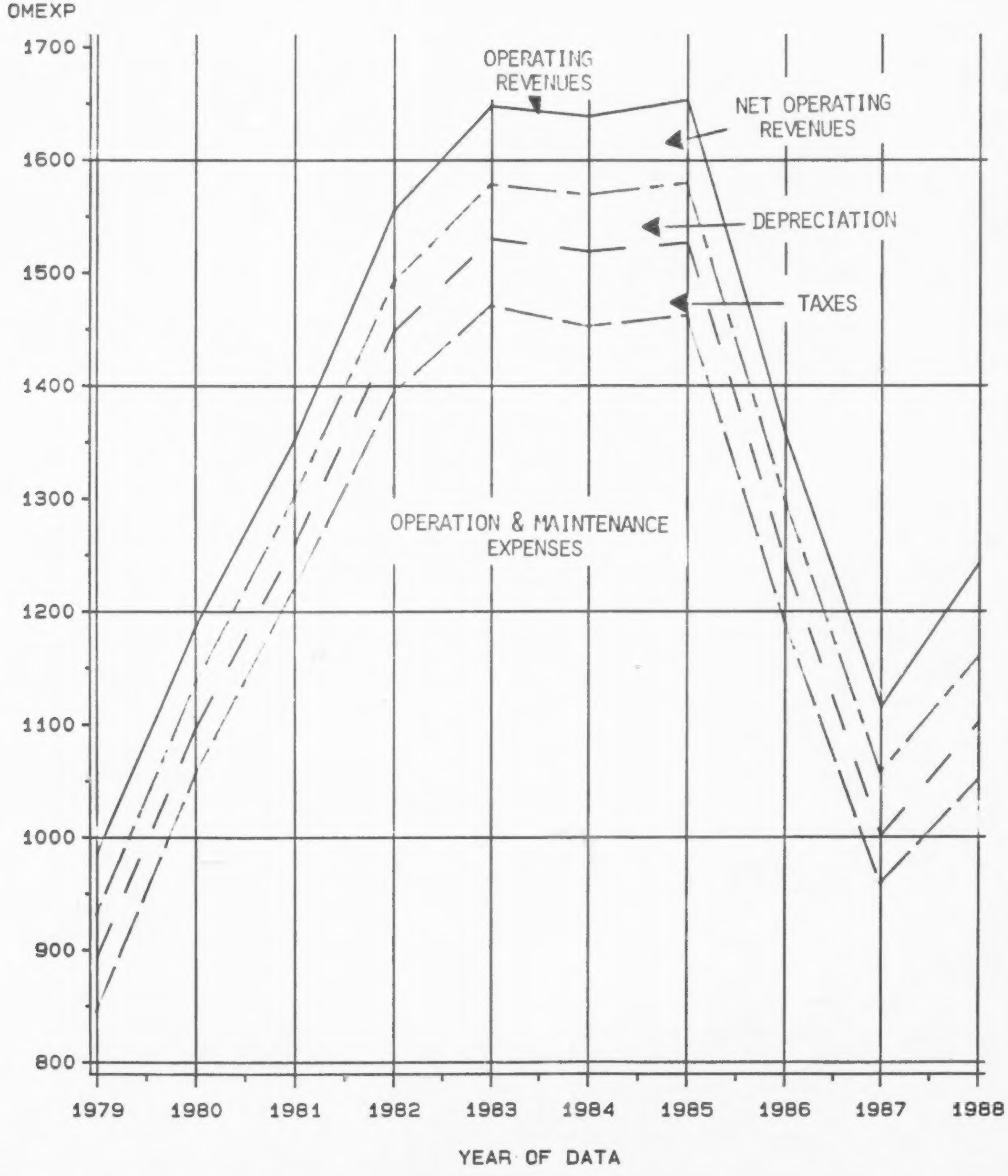


CHART 17

AVERAGE ANNUAL USE
RESIDENTIAL GAS SPACEHEATING CUSTOMERS

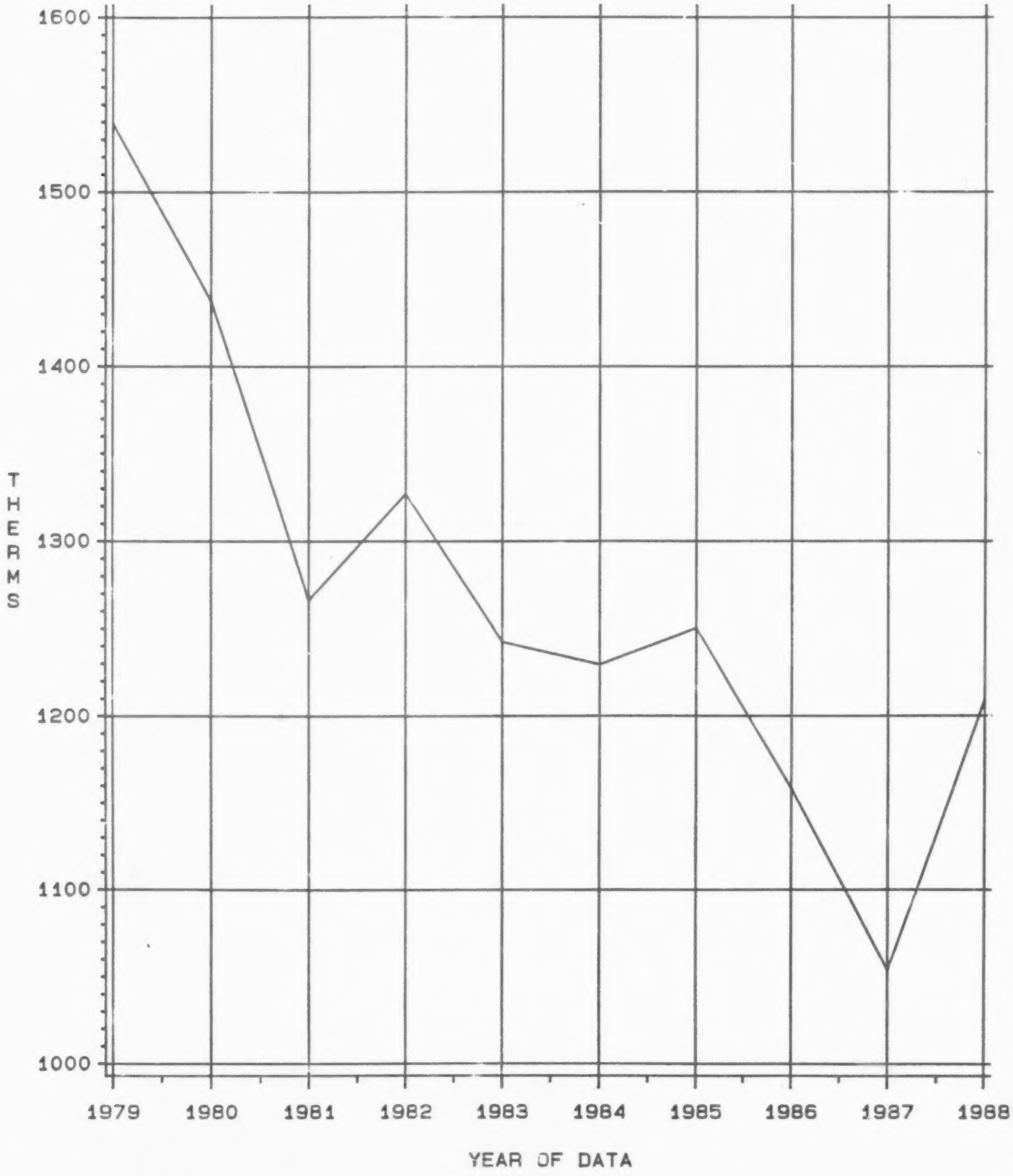


CHART 18
REVENUE PER THERM
RESIDENTIAL GAS SPACEHEATING CUSTOMERS

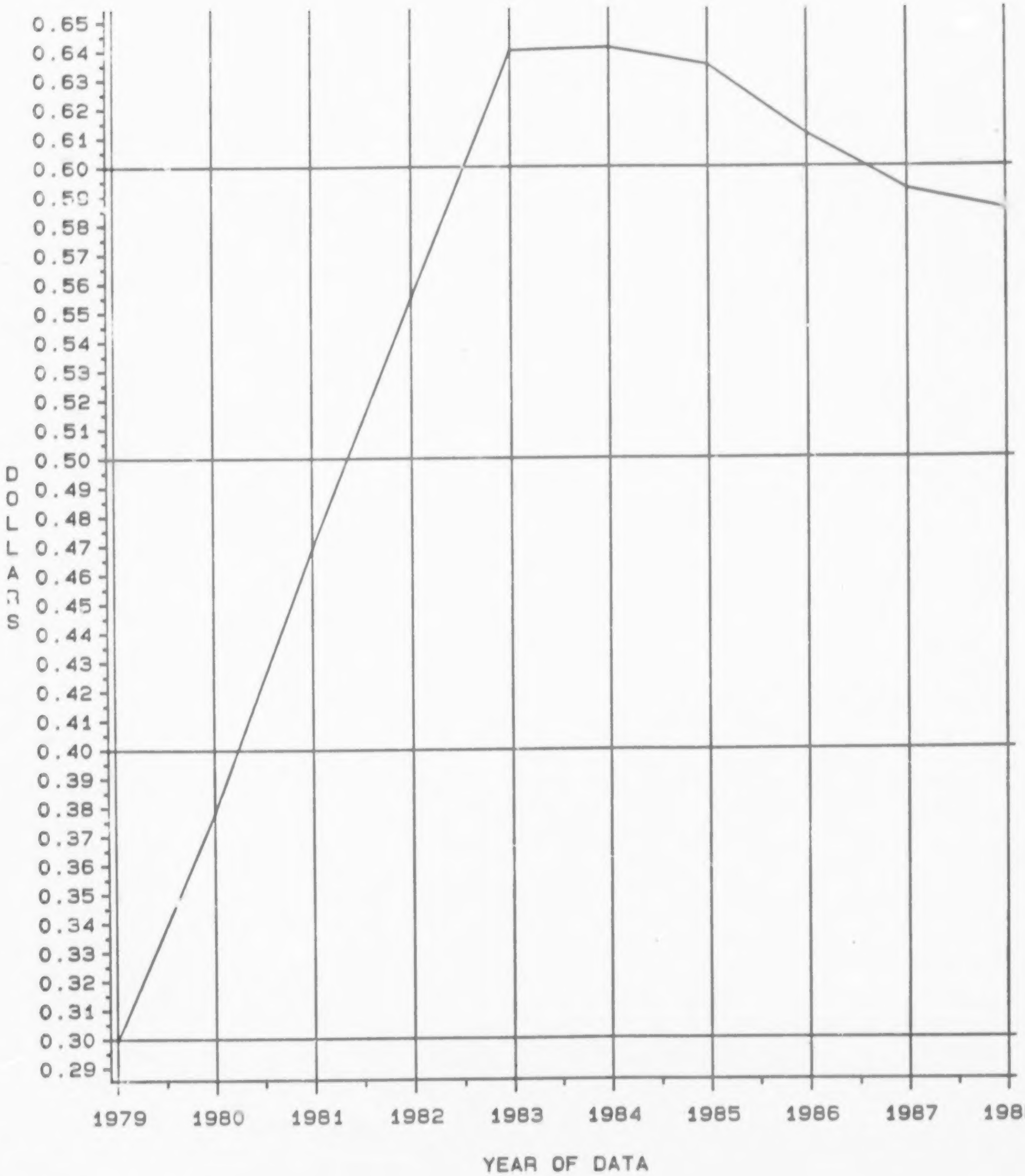


CHART 19

AVERAGE ANNUAL BILL

RESIDENTIAL GAS SPACEHEATING CUSTOMERS

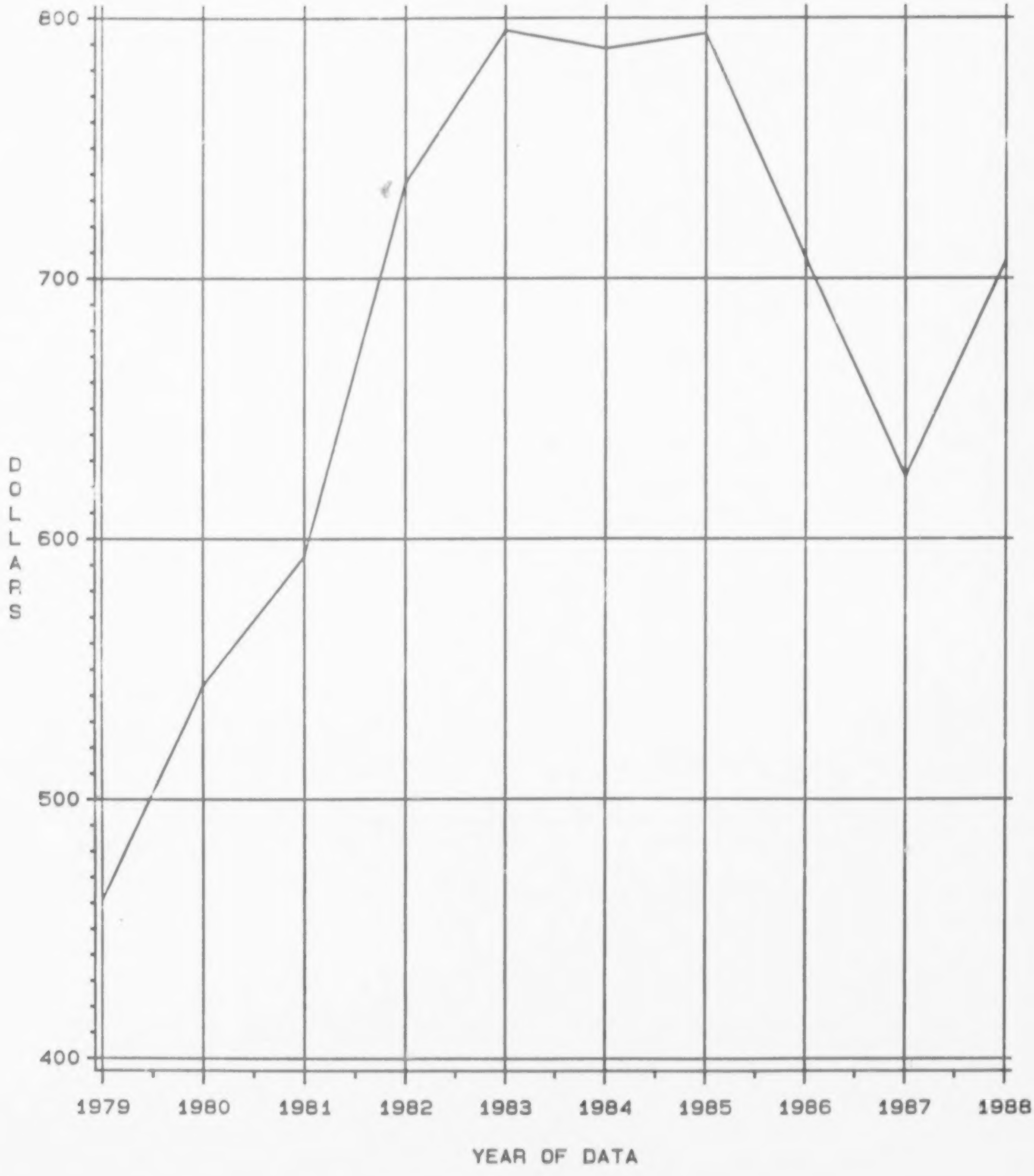
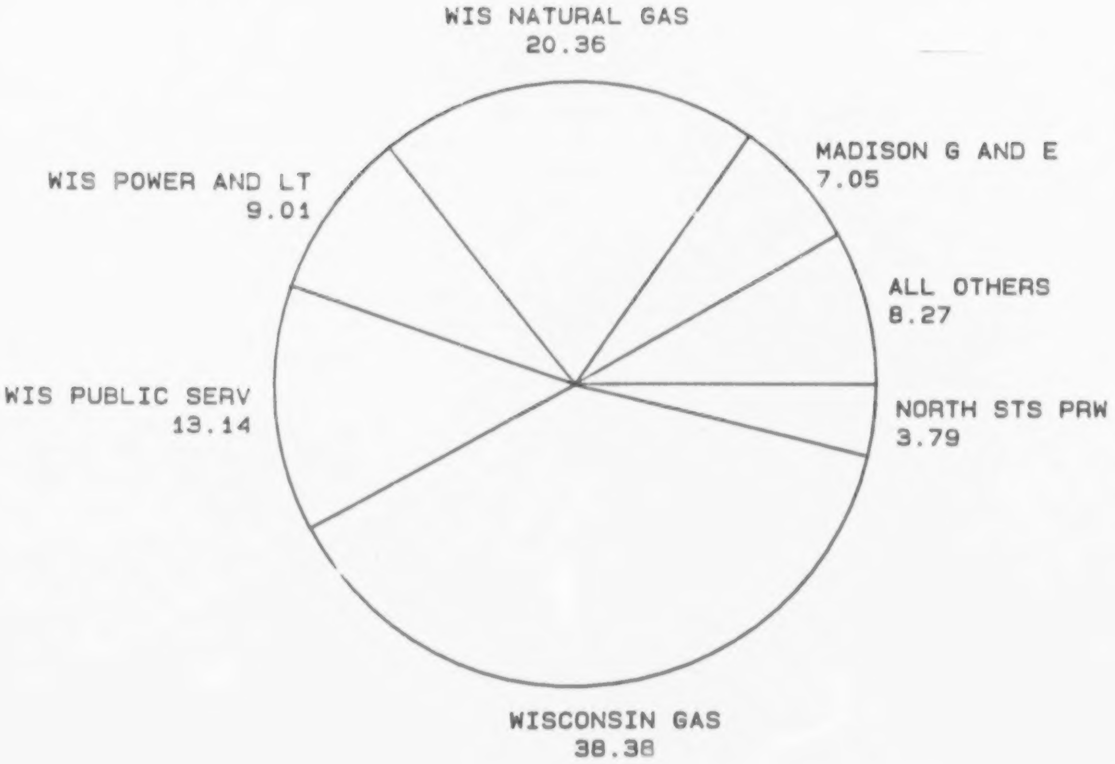


CHART 20

REVENUES OF WISCONSIN GAS UTILITIES IN PERCENT OF TOTAL SALES TO ULTIMATE CONSUMERS 1988

SUM OF PERCENT BY UTILITY



Revenue and Consumption Ratios

The following table shows average revenue per therm, therms sold per customer and revenue per customer for each of the principle classes of service.

	1988	1987	1986
Revenue Per Therm (Cents)			
Residential - General	70.7	71.4	73.2
Residential - Space Heating	58.5	59.2	61.1
Commercial and Industrial - Firm	44.4	44.9	46.3
Commercial and Industrial - Interruptible	33.9	33.5	36.8
Commercial and Industrial - Space Heating	47.5	47.9	50.4
Therms Per Customer			
Residential - General	278	266	286
Residential - Space Heating	1,209	1,054	1,158
Commercial and Industrial - Firm	25,140	25,268	36,172
Commercial and Industrial - Interruptible	157,052	165,784	394,355
Commercial and Industrial - Space Heating	6,650	6,077	6,897
Revenue Per Customer			
Residential - General	$ 196	$ 190	$ 209
Residential - Space Heating	707	624	708
Commercial and Industrial - Firm	11,166	11,338	16,751
Commercial and Industrial - Interruptible	53,170	55,449	145,007
Commercial and Industrial - Space Heating	3,162	2,911	3,473

Revenue per therm decreased for all classifications in 1988 except commercial and industrial interruptible. Therms sold per customer decreased for commercial and industrial firm and interruptible classifications. Revenue per customers increased for all classes of service except commercial and industrial firm and interruptible. Charts 17, 18 and 19 presents a comparison of average residential spaceheating bills and consumption over a 9-year period.

Gas Utility Plant Statistics

Table 14 supplies a summary of operating and plant statistics of the gas utility industry in Wisconsin. Over 99.9% of the 3,139 million therms delivered to mains in 1988 was natural gas. Almost 21,004 miles of main were in service at the close of 1988, exclusive of that owned by the pipeline companies. This presents a 2.74% increase over a year earlier.

Data on Individual Utilities

Individual company statistics for 1988 are presented in Table 15. Chart 20 shows a breakdown by company of total sales to ultimate consumers. The Wisconsin Gas Company accounted for 38% of total sales revenue from ultimate consumers and the five largest utilities made up 88% of the total.

TABLE 12

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN GAS UTILITIES 1/
1988-1986

	1988	1987	1986
Operating Revenues			
Sales to Ultimate Consumers	$ 1,191,045,505	$ 1,058,990,881	$ 1,339,930,046
Sales to Other Gas Utilities	0	0	0
Total Sales of Gas	$ 1,191,045,505	$ 1,058,990,881	$ 1,339,930,046
Other Operating Revenues	51,585,849	55,703,076	15,829,023
Total Operating Revenues	$ 1,242,631,354	$ 1,114,693,957	$ 1,355,759,069
Operating Expenses			
Production			
Other Gas Expenses	$ 652,221	$ 221,322	$ 329,885
Purchased Gas - Natural	831,804,871	752,633,393	981,166,767
Storage	1,102,796	805,158	706,193
Total Production Expense	$ 833,559,888	$ 753,659,873	$ 982,202,845
Transmission and Distribution	65,088,748	59,618,761	59,452,887
Customer Accounts	50,740,934	51,756,030	54,707,911
Customer Services	28,869,849	28,405,425	26,480,653
Sales Promotion	4,656,802	4,031,810	3,722,098
Administrative and General	67,785,685	60,798,867	63,971,410
Total Operation and Maint.	$ 1,050,701,906	$ 958,270,766	$ 1,190,537,804
Depreciation 2/	57,706,220	56,378,486	55,664,535
Taxes Other than Income Taxes	20,348,415	22,455,252	24,668,845
Income Taxes	30,600,591	20,040,811	27,807,934
Total Operating Expenses	$ 1,159,357,132	$ 1,057,145,315	$ 1,298,679,118
Net Operating Revenues	$ 83,274,222	$ 57,548,642	$ 57,079,951

1/ Excluding out-of-state operations except where noted.

2/ Including amortization of plant acquisition adjustments, conversion costs, and other utility plant not subject to charges for depreciation.

TABLE 13

SALES TO ULTIMATE CUSTOMERS BY CLASSES
WISCONSIN GAS UTILITIES 1/
1988-1986

	1988	1987	1986
Revenue from Gas Sold to Ultimate Consumers			
Residential - General	$ 15,818,940	$ 15,787,296	$ 17,855,600
Residential - Space Heating	700,891,651	603,701,083	668,594,469
Commercial and Industrial Firm	89,541,284	92,261,231	139,769,007
Commercial and Industrial Interruptible	74,278,092	70,586,042	195,614,830
Commercial and Industrial Space Heating	304,147,667	270,889,528	312,339,530
Interdepartmental	6,367,871	5,765,701	5,756,610
Total	$ 1,191,045,505	$ 1,058,990,881	$ 1,339,930,046
Therms of Gas Sold to Ultimate Consumers			
Residential - General 2/	22,377,639	22,092,079	24,407,578
Residential - Space Heating	1,198,457,195	1,020,022,501	1,094,464,962
Commercial and Industrial Firm	201,599,020	205,606,935	301,820,741
Commercial and Industrial Interruptible	219,402,203	211,042,900	531,985,466
Commercial and Industrial Space Heating	639,772,402	565,582,741	620,220,724
Interdepartmental	20,520,368	17,350,811	15,196,044
Total	2,302,128,827	2,041,697,967	2,588,095,515
Average Number of Customers			
Residential - General 2/	80,615	83,158	85,480
Residential - Space Heating	991,631	967,711	944,962
Commercial and Industrial Firm	8,019	8,137	8,344
Commercial and Industrial Interruptible	1,397	1,273	1,349
Commercial and Industrial Space Heating	96,202	93,070	89,921
Interdepartmental	7	7	8
Total	1,177,871	1,153,356	1,130,064

1/ Excluding out-of-state operations.

2/ The decline in Residential General consumption and customers is due to the transfer of Residential Customers to the Residential Space Heating classification when gas furnaces are installed.

TABLE 14

OPERATING AND PLANT STATISTICS
WISCONSIN GAS UTILITIES 1/
1988-1986

	1988	1987	1986
Disposition of Gas Delivered to Mains (Therms)			
Gas Sold in Wisconsin			
To Ultimate Consumers	2,302,128,827	2,041,697,967	2,574,971,561
To Other Gas Utilities	0	0	0
Total	2,302,128,827	2,041,697,967	2,574,971,561
Gas Used by Company	6,203,827	5,688,830	6,162,082
Transport Gas Out	843,511,705	743,164,622	272,749,189
Total Sold, Used and Transported Gas	3,151,844,359	2,790,551,419	2,853,882,832
Gas Unaccounted for	(13,240,424)	(36,973,573)	11,646,786
Gas Delivered to Mains	3,138,603,935	2,753,577,846	2,865,529,618
Percentage of Gas Unaccounted for	(0.42)%	(1.34)%	0.41 %
Gas Produced (Therms)			
Liquefied Petroleum Gas	27,055	8,400	10,753
Natural Gas Purchased (Therms)			
From ANR Company	1,612,551,426	1,600,901,407	2,244,982,830
From Natural Gas Pipe Line Co.	64,037,860	55,659,540	74,498,140
From Midwest Gas Transmission Company	9,926,690	8,779,900	11,556,798
From Northern Natural Gas Co.	232,535,101	213,832,919	250,831,139
Other Gas Pipelines	379,357,130	131,289,718	13,218,906
Total Natural Gas Purchase	2,298,408,207	2,010,463,484	2,595,087,813
Total Gas Produced & Purch.	2,298,435,262	2,010,471,884	2,595,098,566
Net Inventory Change	(3,222,859)	2,062,083	(2,327,976)
Transport Gas In	843,391,532	741,043,879	272,759,028
Gas Delivered to Mains	3,138,603,935	2,753,577,846	2,865,529,618
Miles of Distribution and Transmission Mains 2/	21,004	20,443	20,042

1/ Excluding out-of-state operations.
2/ Not including transmission mains owned by pipeline companies.

TABLE 15

CONDENSED SUMMARY OF 1988 OPERATIONS
INDIVIDUAL GAS UTILITIES 1/

Utilities	Operating Revenue 2/	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Net Operating Revenues	Therms Sold 2/	Therms Produced	Therms Purchased 3/6/	Therms Produced & Purchased	Average Number of Customers 2/
Class A and B											
City Gas Co. of Antigo	$ 3,762,946	$ 3,307,840	$ 106,534	$ 66,606	$ 75,008	$ 206,958	5,967,420	0	6,201,742	6,201,742	3,540
Madison Gas & Elec. Co.	87,571,250	72,135,926	5,153,847	1,476,672	1,380,645	7,424,160	167,148,171	4,186	167,535,380	167,539,566	80,335
Midwest Natural Gas Co.	3,468,947	2,999,681	128,236	62,841	110,800	167,389	10,279,608	0	10,524,550	10,524,550	4,117
Northern States Power Co.	47,068,012	40,234,676	2,300,507	706,962	1,197,835	2,628,032	126,751,727	0	137,020,751	137,020,751	44,523
Superior Water, Light & Power Co.	8,860,334	7,662,366	395,673	169,482	204,998	427,815	19,080,701	20,890	19,694,850	19,715,740	8,845
Wisconsin Fuel & Light Co.	44,652,923	39,493,472	1,658,775	803,165	729,703	1,967,808	88,444,280	0	86,934,750	86,934,750	40,291
Wisconsin Gas Company	476,903,668	399,756,427	20,952,483	8,074,539	13,578,596	34,541,623	843,410,330	0	818,423,816	818,423,816	430,785
Wisconsin Natural Gas Company	252,953,253	213,091,156	12,644,063	3,320,290	5,119,648	18,778,096	443,774,189	0	442,959,025	442,959,025	244,013
Wisonsin Power & Light Co.	111,988,525	98,287,357	6,214,539	2,171,544	2,137,684	3,177,401	207,761,560	0	215,190,248	215,190,248	112,016
Wisconsin Public Service Corp.	163,334,627	138,562,320	6,245,674	2,646,904	4,922,978	10,956,751	303,429,292	0	304,812,749	304,812,749	162,517
Wisconsin Southern Gas Co.	36,511,177	30,160,981	1,714,588	744,670	1,112,386	2,778,552	72,242,594	1,802	72,168,938	72,170,740	41,082
Subtotal	$1,237,075,662	$1,045,692,202	$57,514,919	$20,243,675	$30,570,281	$83,054,585	2,288,289,872	26,878	2,281,466,799	2,281,493,677	1,416,077
Class C & D 5/											
Elroy Gas, Inc.	505,381	449,754	17,683	11,953	(261)	26,252	1,002,386	0	1,002,770	1,002,770	489
Muny Natural Gas Co. 4/	1,098,146	1,011,229	21,876	23,300	0	41,741	3,002,572	0	3,030,470	3,030,470	990
Natural Gas, Inc.	1,372,036	1,194,203	52,885	26,287	18,119	80,542	3,342,765	0	3,252,050	3,252,050	880
St. Croix Valley Natural Gas Co.	2,580,129	2,354,518	98,857	43,200	12,452	71,102	6,491,232	177	6,544,310	6,544,487	3,448
Subtotal	$ 5,555,692	$ 5,009,704	$ 191,301	$ 104,740	$ 33,310	$ 219,637	13,838,965	177	13,829,600	13,829,777	5,807
Total All Utilities	$1,242,631,354	$1,050,701,906	$57,706,220	$20,348,415	$30,600,591	$83,274,222	2,302,128,827	27,055	2,295,296,399	2,295,323,454	1,421,884

( ) Denotes Negative Figure.
1/ Data includes Wisconsin operations only.
2/ Includes Interdepartmental Sales and Sales for Resale.
3/ Out-of-state sales by Lake Superior District Power, Wisconsin Public Service Corporation and Wisconsin Power & Light Co. were subtracted from the therms purchased figure to give an estimated figure for Wisconsin only.
4/ Municipally owned.
5/ There are no Class D private gas utilities.
6/ Net Interchange and Net Transport Gas included.

TELEPHONE UTILITY SUMMARY

Comparative statistics of telephone utilities in Wisconsin during the period 1986-1988 are presented in this session. In addition, selected data over a 10-year period are presented in Chart 21. The coverage is summarized below:

Table 16 - Comparative Statement of Revenues and Expenses, Wisconsin Telephone Utilities, 1988-1986
Table 17 - Access Lines Served by Wisconsin Telephone Utilities, 1988-1986
Table 18 - Condensed Summary of 1988 Operations, Individual Telephone Utilities

Chart 21 - Comparison of Revenues and Expenses, Wisconsin Telephone Utilities, 1979-1988

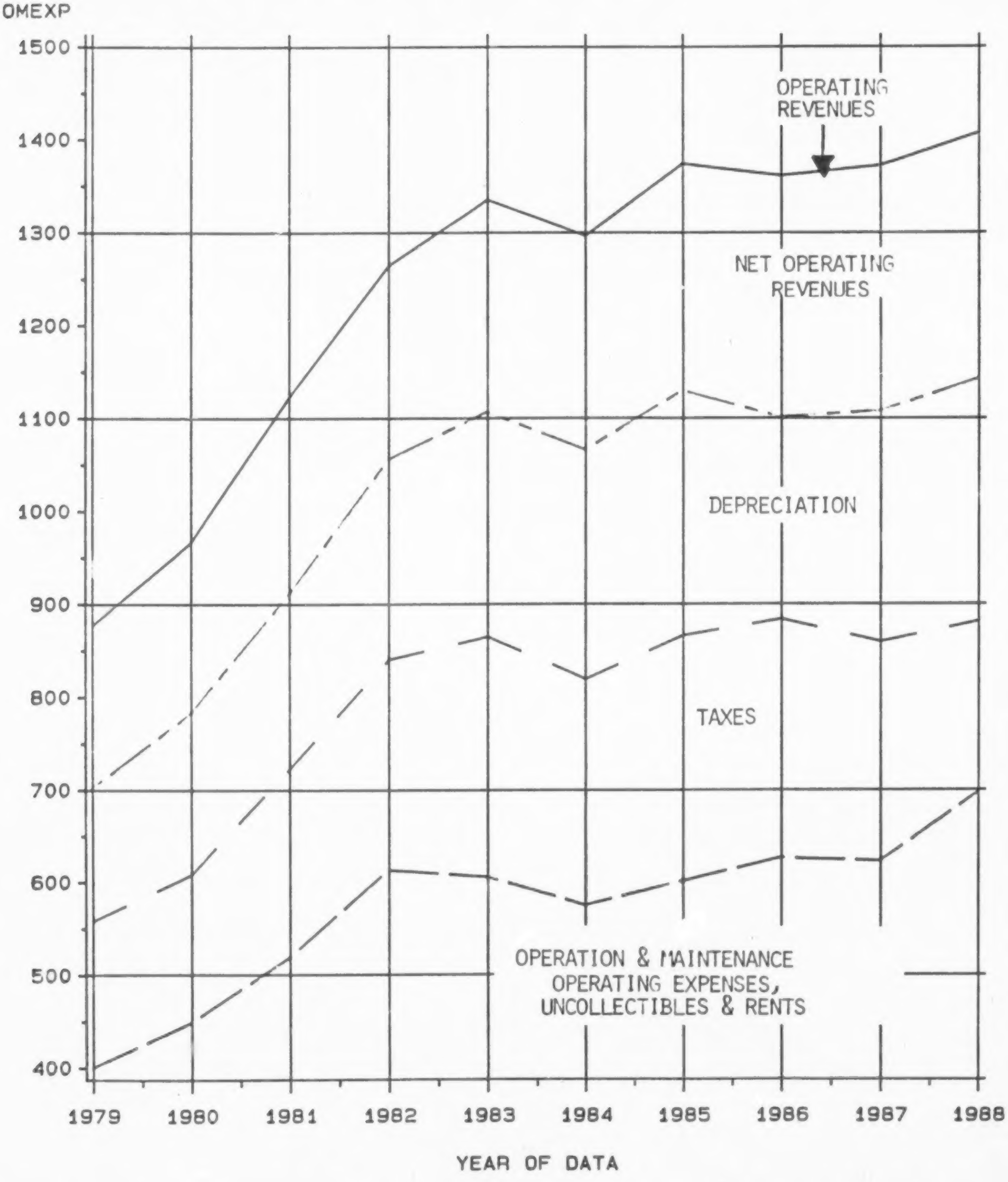
Telephone Utility Revenues and Expenses

Table 16 shows that telephone revenues in Wisconsin increased over $34.8 million in 1988, or 2.5%. Total operating expenses were up about $34.7 million, a 3.1% increase. Net operating revenue was up about $68.7 thousand or 0.03%.

Toll service revenues increased 1.35% during the year. Local service revenues also increased by 4.75%.

CHART 21

WISCONSIN TELEPHONE UTILITIES REVENUES AND EXPENSES



Access Line Data

Access Line data is presented in Table 17. About 2.4 million access lines were in service at the close of 1988. Approximately 77% are used by residential subscribers and 23% by business subscribers.

Individual Companies

Table 18 presents individual company data for each of the 99 companies operating in the State. The Wisconsin Bell Company alone accounted for 68.6% of the revenues and served 66.9% of the customer access lines. General Telephone Company accounted for another 15.3% of the total revenues and served 14.9% of the access lines.

TABLE 16

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN TELEPHONE UTILITIES
1988-1986

	1988	1987	1986
Operating Revenues			
Exchange Service Revenue	$ 576,120,929	$ 587,895,117	$ 574,947,490
Access Revenues	461,929,043	440,972,555	445,252,064
Toll Service Revenue	218,253,732	215,349,920	203,880,795
Miscellaneous Oper. Rev. 1/	150,832,080	128,121,766	136,990,323
Total Operating Revenues	$ 1,407,135,784	$ 1,372,339,358	$ 1,361,070,672
Operating Expenses			
Plant Specific Operations Exp.	$ 191,160,576		
Plant Nonspecific Oper. Exp.	152,937,443		
Customer Operations Exp. 1/	171,612,602		
Corporate Operations Exp.	183,122,455		
Other Expenses	(101,145)		
Total Operation and Maintenance 2/	$ 698,731,931	$ 624,936,245	$ 628,311,687
Depreciation and Amortization	262,477,405	249,774,847	218,560,598
Income Taxes 3/	182,761,063	234,531,608	255,478,208
Total Operating Expenses	$ 1,143,970,399	$ 1,109,242,700	$ 1,102,350,493
Net Operating Revenue	$ 263,165,385	$ 263,096,658	$ 258,720,179

1/ Contrary to normal procedure uncollectible revenues were included in the operating revenues and operation and maintenance expense data shown in this table. This was done to be consistent with the way it is handled for other types of utilities.

2/ Due to a new System of Accounts for telephones, it was not feasible to compare this year's breakdown of Operations and Maintenance Expense with the previous years.

3/ Taxes Other Than Income Taxes included.

TABLE 17

CUSTOMER ACCESS LINES SERVED BY WISCONSIN TELEPHONE COMPANIES
1988-1986

	December 31, 1988	December 31, 1987	December 31, 1986
Residential	1,827,743	1,795,785	1,764,956
Business 1/	544,660	519,104	490,842
Total Access Lines	2,372,403	2,314,889	2,255,798

1/ Includes pay and mobile lines.

TABLE 18

A SUMMARY OF 1988 OPERATIONS FOR INDIVIDUAL TELEPHONE UTILITIES

Utility	Operating Revenue 1/	Operation and Maintenance Expense 1/	Depreciation and Amortization Expense	Operating Taxes	Total Operating Expense	Net Operating Income	Access Lines End-of-Year 2/
Amery Telephone Company	$ 2100456.00	$ 793860.00	$ 470629.00	$ 340234.00	$ 1604723.00	$ 495733.00	4702
Amherst Telephone Company	1823285.00	529292.00	344960.00	351815.00	1226067.00	597218.00	3407
Badger Telecom, Inc.	1890718.22	921445.79	334919.42	248136.05	1504501.26	386216.96	3732
Baldwin Telecom, Inc.	1244196.00	584703.00	280412.00	103964.00	969079.00	275117.00	2726
Bayland Telephone Inc	677784.90	268416.32	134796.83	93595.77	496808.92	180975.98	1294
Belmont Telephone Company	315104.00	148855.00	63741.00	25696.00	238292.00	76812.00	695
Bergen Telephone Company	162872.62	84098.54	13151.00	25390.68	122640.22	40232.40	164
Black Earth Telephone Company	486785.13	282138.37	76738.26	63624.24	422500.87	64284.26	1072
Bloomer Telephone Company	994635.75	283099.11	236281.82	175411.80	694792.73	299843.02	2556
Bonduel Telephone Company	651565.72	353541.24	124688.49	87995.93	566225.66	85340.06	1421
Bruce Telephone Company, Inc	960359.12	326929.88	210365.70	124024.98	661320.56	299038.56	1278
Burlington Brighton & Wheatland Tel	1243042.16	673101.70	190157.37	160203.62	1023462.69	219579.47	2677
Casco Telephone Company	608675.00	285417.62	120021.87	57976.68	463416.17	145258.83	995
Cencom of Wisconsin, Inc.	11693615.00	5843461.00	2350039.00	1373317.00	9566817.00	2126798.00	20914
Central State Telephone Company	3966512.55	1810324.51	780138.26	543380.06	3133842.83	832669.72	6965
Century Telephone of Wis., Inc.	30613778.63	14526965.39	5949687.31	4397356.04	24874008.74	5739769.89	41805
Chequamegon Telephone Coop Inc	3163459.17	1198225.36	954463.19	0.00	2152688.55	1010770.62	5548
Chibardun Telephone Cooperative Inc	2115451.64	912084.31	501511.97	122627.87	1536224.15	579227.49	4395
Citizens Telephone Cooperative Inc	769584.00	250051.00	156993.00	41592.00	448636.00	320948.00	1636
Clear Lake Telephone Company, Inc	550144.28	269300.13	112772.23	62002.41	444074.77	106069.51	1172
Cochrane Cooperative Telephone Co	496118.00	237158.00	102778.00	26166.00	366102.00	130016.00	1044
Coon Valley Farmers Telephone Co	631394.17	227009.12	114997.33	106248.23	448254.68	183139.49	1879
Crandon Telephone Company	1275360.68	496371.02	377240.41	62367.72	935979.15	339381.53	2266
Cuba City Tel Exchange Co.	723500.00	248475.00	117555.00	104107.00	470137.00	253363.00	1428
Dickeyville Telephone Corporation	792041.00	628256.00	96707.00	21621.00	746584.00	45457.00	918
Dodge County Telephone Company	425432.99	262837.94	91360.97	14448.33	368647.24	56785.75	876
Fairwater Brandon Alto Telephone Co	638442.31	383068.17	111544.75	71724.51	566337.43	72104.88	1087
Farmers Independent Telephone Co	1008791.00	397689.00	184253.00	168432.00	750374.00	258417.00	2186
Farmers Telephone Company	2216879.00	711712.00	418816.00	402838.00	1533366.00	683513.00	5152
Fennimore Telephone Company	645394.47	367772.94	140323.75	47840.85	555937.54	89456.93	1541
Footville Telephone Company	389449.00	194659.00	99456.00	10342.00	304457.00	84992.00	775
Forestville Telephone Company, Inc	669834.79	329662.83	109060.77	91113.47	529837.07	139997.72	1782
GTE North Inc.- Wisconsin Operations	215746358.00	95919885.00	52639353.00	23755259.00	172314497.00	43431861.00	353050
Greenwood Telephone Company	611906.71	344109.36	120976.66	73252.01	538338.03	73568.68	1307
Hager City Telephone Company	972678.00	523076.00	178181.00	84466.00	785723.00	186955.00	1625

TABLE 18 (Continued)

A SUMMARY OF 1988 OPERATIONS FOR INDIVIDUAL TELEPHONE UTILITIES

Utility	Operating Revenue 1/	Operation and Maintenance Expense 1/	Depreciation and Amortization Expense	Operating Taxes	Total Operating Expense	Net Operating Income	Access Lines End-of-Year 2/
Headwaters Telephone Company	$ 2572312.63	$ 663893.84	$ 833010.01	$ 261768.64	$ 1758672.49	$ 813640.14	3858
Hillsboro Telephone Company Inc	616912.25	301109.05	138031.56	43227.22	482367.83	134544.42	1378
Indianhead Telephone Co.	840509.00	329033.00	237095.00	70466.00	636594.00	203915.00	1594
La Valle Telephone Cooperative, Inc	652142.00	305723.00	195651.00	34454.00	535828.00	116314.00	1540
Lakefield Telephone Company	671809.00	243436.00	167307.00	78851.00	489594.00	182215.00	1259
Lakeshore Telephone Company	728009.99	453899.99	115407.20	57363.60	626670.79	101339.20	1568
Larsen-Readfield Telephone Company	681231.71	360818.92	136694.25	69407.97	566921.14	114310.57	1952
Lemonweir Valley Telephone Company	1284958.88	443028.34	253266.83	189952.77	886247.94	398710.94	2437
Luck Telephone Company	818911.00	373139.00	134435.00	128161.00	635735.00	183176.00	1808
Madeline Island Telephone Company	151425.78	89627.31	20231.72	12900.05	122759.08	28666.70	265
Manawa Telephone Company, Inc	1015614.72	446568.84	215729.08	105502.96	767800.88	247813.84	1822
Maple Telephone Cooperative, Inc	184031.03	99613.65	11944.63	4160.49	115718.77	68312.26	301
Marquette Adams Telephone Coop Inc	1329319.66	520437.32	315794.37	128988.02	965219.71	364099.95	2503
Mid-Plains Telephone Incorporated	8490638.00	3396672.00	1506945.00	1380283.00	6283900.00	2206738.00	16714
Midway Telephone Company	3276696.85	1311682.37	575782.57	533126.40	2420591.34	856105.51	6086
Milltown Mutual Telephone Company	815971.00	394937.00	158984.00	92709.00	646630.00	169341.00	1869
Mondovi Telephone Company	1357189.00	714830.00	202702.00	178272.00	1095804.00	261385.00	2100
Monroe County Telephone Company	3624797.40	1778683.92	599419.22	409186.84	2787289.98	837507.42	8450
Mosel & Centerville Telephone Co.	1496519.30	700455.65	301580.00	213287.31	1215322.96	281196.34	2794
Mosinee Telephone Company	1699508.00	815421.00	282452.00	221599.00	1319472.00	380036.00	3451
Mount Horeb Telephone Company	1712374.16	691515.43	338651.13	216108.49	1246275.05	466099.11	2863
Mount Vernon Telephone Company	2683266.47	1210838.38	661749.67	266963.88	2139551.93	543714.54	5135
Nelson Telephone Cooperative	1621281.59	686296.60	411613.07	77868.09	1175777.76	445503.83	3198
Niagara Telephone Company	1656680.00	728727.00	255642.00	240888.00	1225257.00	431423.00	3090
North-West Telephone Company	26172142.00	12542219.00	5095395.00	2455594.00	20093208.00	6078934.00	52024
Northeast Telephone Company	2151533.54	895435.60	439021.33	311916.38	1646373.31	505160.23	4621
Novy Telephone Company	242056.00	125484.00	19976.00	14101.00	159561.00	82495.00	516
Peoples Telephone Co (Mount Hope)	784382.53	434828.29	146807.86	87568.72	669204.87	115177.66	1623
Peoples Telephone Co. The (Randolph)	2990579.82	1110065.51	621952.98	399902.56	2131921.05	858658.77	5312
Platteville Telephone Company	4097510.00	1847767.00	827797.00	413089.00	3088653.00	1008857.00	7270
Price County Telephone Company	1815537.82	757292.08	404781.95	236304.91	1398378.94	417158.88	3565
Rhinelander Telephone Company	3786131.47	1672534.92	675494.00	606995.40	2955024.32	831107.15	10273
Rib Lake Telephone Company	559568.00	248265.00	117754.00	75993.00	442012.00	117556.00	1046
Richland Grant Telephone Cooperative	1139365.41	576678.06	295793.77	63105.87	935577.70	203787.71	2163
Rock River Telephone Company	746999.98	376634.93	137289.21	68933.75	582857.89	164142.09	1368

TABLE 18 (Concluded)

A SUMMARY OF 1988 OPERATIONS FOR INDIVIDUAL TELEPHONE UTILITIES

Utility	Operating Revenue 1/	Operation and Maintenance Expense 1/	Depreciation and Amortization Expense	Operating Taxes	Total Operating Expense	Net Operating Income	Access Lines End-of-Year 2/
Scandinavia Telephone Company	$ 1035221.53	$ 492547.38	$ 154977.17	$ 163394.69	$ 810919.24	$ 224302.29	1912
Sharon Telephone Company	628680.05	318251.11	60794.84	110161.12	489207.07	139472.98	977
Shell Lake Telephone Company	865329.00	341124.00	172467.00	135100.00	648691.00	216638.00	1793
Siren Telephone Company Incorporated	770480.00	322462.00	138424.00	123318.00	584204.00	186276.00	1722
Solon Springs Telephone Company	5472716.26	2567632.22	1131231.11	652938.30	4351801.63	1120914.63	13683
Somerset Telephone Company, Inc	652380.00	299954.00	106940.00	83733.00	490627.00	161753.00	1278
Southeast Telephone Co of Wisc, Inc	2447372.80	1131382.01	382040.79	299776.54	1813199.34	634173.46	5566
Spring Valley Telephone Company, Inc	456458.42	234464.18	95503.50	36052.24	366019.92	90438.50	819
St Croix Telephone Company	2943931.00	842521.00	627504.00	502440.00	1972465.00	971466.00	5239
State Long Distance Telephone Co	3372914.00	1561065.00	446053.00	588547.00	2595665.00	777249.00	5887
Stockbridge & Sherwood Telephone Co	1293072.11	633071.66	271526.29	178298.06	1082896.01	210176.10	2218
Sullivan Telephone Company	763891.00	254156.00	182822.00	109928.00	546906.00	216985.00	1618
Tenney Telephone Company	360857.51	362892.50	51323.48	-12645.25	401570.73	-40713.22	864
Thorp Telephone Company	992832.00	549778.00	162151.00	122783.00	834712.00	158120.00	1880
Tri-County Telephone Coop, Inc	1729288.88	776681.10	346731.10	109598.05	1233010.25	496278.63	3273
Turtle Lake Telephone Company Inc	511931.00	264875.00	70830.00	61790.00	397495.00	114436.00	1136
UTELCO, Inc.	6317897.00	3147186.00	856098.00	715366.00	4718650.00	1599247.00	12333
Union Telephone Company	1965281.00	648583.00	388947.00	321362.00	1358892.00	606389.00	3173
Universal Tel Co of Northern Wis Inc	4903352.22	2192916.91	1020021.84	651408.06	3864346.81	1039005.41	10868
Urban Telephone Corporation	7170385.94	3213592.17	1327602.45	907196.12	5448390.74	1721995.20	15991
Valders Telephone Company	965172.75	512436.97	186560.64	110131.65	809129.26	156043.49	1807
Vernon Telephone Cooperative	2435667.08	1122554.71	556239.33	151155.14	1829949.18	605717.90	5237
Viroqua Telephone Company	1981329.39	996470.48	297990.62	340818.97	1635280.07	346049.32	2955
Waunakee Telephone Company Inc	1528323.22	797593.49	238329.44	288321.76	1324244.69	204078.53	3539
Wayside Telephone Company	593164.00	283979.00	125143.00	56609.00	465731.00	127433.00	1196
West Wisconsin Telcom Coop, Inc	2365344.00	804336.00	581150.00	153872.00	1539358.00	825986.00	3618
Wisconsin Bell, Inc.	964956784.00	499987232.00	165155512.00	131633775.00	796776519.00	168180265.00	1586360
Wittenberg Telephone Company	984411.00	376661.00	185012.00	140806.00	702479.00	281932.00	1762
Wood County Telephone Company	8927796.00	4430888.00	1996227.00	837456.00	7264573.00	1663223.00	20013
Total	$1407135784.16	$698731930.54	$262477405.37	$182761063.02	$1143970398.93	$263165385.23	2372403

1/ Contrary to normal procedure uncollectible revenues were included in the operating revnues and operation and maintenance expense data shown in this table. This was done to be consistent with the way it is handled for other types of utilities.

2/ Access lines include only business and residential lines.

WATER UTILITIES

Comparative statistics of water utilities operating in Wisconsin during the period from 1986 through 1988 are presented in this section. Chart 22 shows a summary of the income account over a ten-year period. The coverage is summarized below:

Table 19 - Comparative Statement of Revenue and Expenses Wisconsin Water Utilities, 1988-1986.
Table 20 - Operating and Plant Statistics, Wisconsin Water Utilities, 1988-1986.
Table 21 - Condensed summary of 1988 Operations, Individual Water Utilities

Chart 22 - Comparison of Revenues and Expenses, Wisconsin Water Utilities, 1979-1988.

Water Utility Revenues and Expenses

Chart 22 shows that revenues and expenses advanced steadily over the past nine years. Taxes are up 96.7% for the period while operation and maintenance expenses are up 81.3%, depreciation rose 65.9%, operating revenues rose 92.7% and net operating revenue increased 167.4%.

Revenues increased 11.99% and operating expenses were up 10.24% during 1988. Net operating revenue increased 20.08%.

Operating and Plant Statistics

The total number of water customers served increased 2.12% in 1988. Gallons of water pumped was up 15.36%. Electric pumpage accounted for 100.0% of the total. Total miles of main increased 3.05%.

Data on Individual Utilities

Table 21 shows selected data on each Class A and B water utility, all but two of which are municipally owned. The table also shows totals for the smaller utilities. Municipal utilities accounted for 96.3% of the total operating revenue and served 97.3% of the customers. Superior, served by Superior Water, Light, and Power Company, and Beloit and Ripon served by Wisconsin Power and Light Company, were the largest cities served by private utilities.

CHART 22

WISCONSIN WATER UTILITIES REVENUES AND EXPENSES

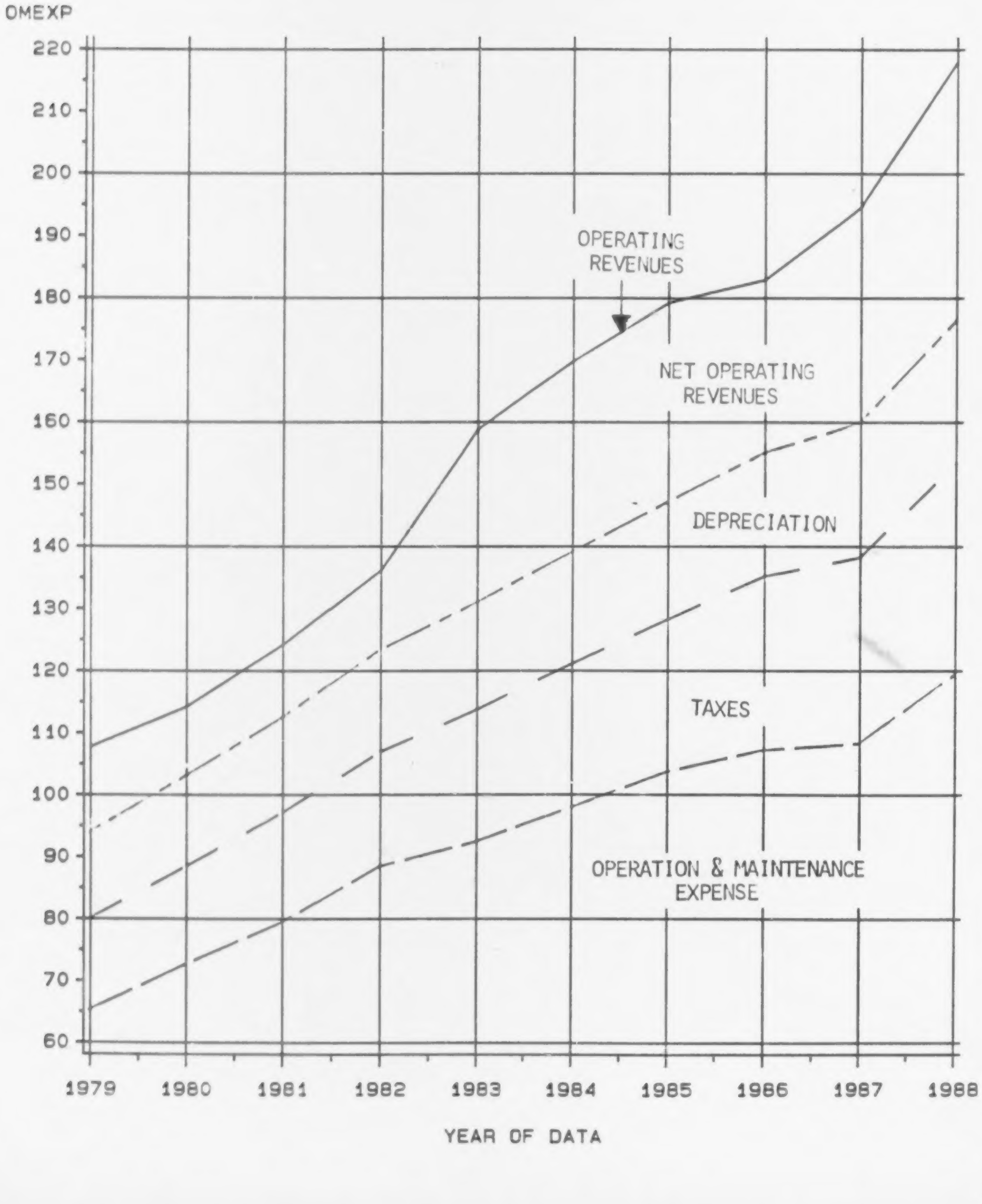


TABLE 19

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN WATER UTILITIES
1988-1986

	1988	1987	1986
All Water Utilities			
Operating Revenues			
Sales to General Consumers	$ 162,721,515	$ 143,799,310	$ 134,477,498
Interdepartmental Sales	153,298	151,195	132,906
Sales to Other Water Utilities	5,852,466	4,906,039	4,698,036
Fire Protection and Other Municipal Sales	45,379,887	42,188,287	39,923,610
Total Sales of Water	$ 214,107,166	$ 191,044,831	$ 179,232,050
Miscellaneous Operating Revenue	3,865,584	3,592,439	3,709,867
Total Operating Revenues	$ 217,972,750	$ 194,637,270	$ 182,941,917
Operating Expenses			
Source of Water Supply (Excluding Purchases)	$ 2,058,126	$ 1,731,457	$ 1,664,306
Water Purchases	7,073,257	5,916,111	5,835,915
Pumping Expenses	27,918,012	25,803,950	26,134,808
Purification	15,825,694	14,457,813	13,945,457
Total Production Expense	$ 52,875,089	$ 47,909,331	$ 47,580,486
Transmission and Distribution	31,464,442	27,386,324	27,785,388
Customer Accounts	7,449,803	7,263,684	7,226,240
Sales	24,454	2,290	21,121
Administrative and General Expenses	27,600,851	25,815,596	24,672,531
Total Operation and Maintenance Expense	$ 119,414,639	$ 108,377,225	$ 107,285,766
Depreciation and Amortization	23,035,649	21,684,370	19,932,315
Taxes Other Than Income Taxes	32,879,279	29,659,995	27,491,522
Income Taxes	1,025,558	256,283	413,115
Total Operating Expenses	$ 176,355,125	$ 159,977,873	$ 155,122,718
Net Operating Revenues	$ 41,617,625	$ 34,659,397	$ 27,819,199

TABLE 19 (Concluded)

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN WATER UTILITIES
1988-1986

	1988	1987	1986
Private Water Utilities			
Total Operating Revenues	$ 8,041,197	$ 7,221,516	$ 6,525,523
Operation and Maintenance	3,710,244	3,501,077	3,644,593
Depreciation and Amortization	650,188	723,557	703,452
Taxes Other Than Income Taxes	436,051	396,904	406,943
Income Taxes	1,025,558	256,283	413,115
Total Operating Expenses	$ 5,822,041	$ 4,877,821	$ 5,168,103
Net Operating Revenues	$ 2,219,156	$ 2,343,695	$ 1,357,420
Municipal Utilities			
Total Operating Revenues	$209,931,553	$187,415,754	$176,416,394
Operation and Maintenance	115,704,395	104,876,148	103,641,173
Depreciation and Amortization	22,385,461	20,960,813	19,228,863
Taxes Other Than Income Taxes	32,443,228	29,263,091	27,084,579
Total Operating Expenses	$170,533,084	$155,100,052	$149,954,615
Net Operating Revenues	$ 39,398,469	$ 34,659,397	$ 26,461,779

TABLE 20

OPERATING AND PLANT STATISTICS
WISCONSIN WATER UTILITIES
1988-1986

	1988	1987	1986
Average Number of Customers			
Residential	890,428	885,277	873,861
Commercial	112,344	96,674	95,686
Industrial	8,956	8,781	7,597
Total	1,011,728	990,732	977,144
Private Utilities	27,206	24,476	26,955
Municipal Utilities	984,522	966,256	950,189
Total	1,011,728	990,732	977,144
Gallons of Water Pumped Into Distribution System (000 Omitted)			
Electric	225,479,234	195,459,755	189,109,940
Internal Combustion	0	0	0
Steam	0	0	0
Purchased	14,068,533	11,325,353	13,108,519
Total	239,547,767	206,785,108	202,218,459
Private Utilities	4,607,686	4,335,108	4,308,307
Municipal Utilities	234,940,081	202,450,000	197,910,152
Total	239,547,767	206,785,108	202,218,459
Miles of Distribution Main on December 31			
Private Utilities	338	362	362
Municipal Utilities	14,557	14,092	13,874
Total	14,895	14,454	14,236

TABLE 21

CONDENSED SUMMARY OF 1988 OPERATIONS
INDIVIDUAL WATER UTILITIES

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Total Operating Expenses	Net Operating Revenues	Average Number of Customers 1/
Private Utilities Class A & B								
Superior Water, Light & Power Co. (SWLP)	$ 3,557,069	$ 1,526,593	$ 146,361	$ 207,573	$ 341,039	$ 2,221,566	$ 1,335,503	9,409
Wisconsin Power & Light Co. (WPL)	4,188,803	1,954,478	465,149	212,237	683,683	3,315,547	873,256	16,136
Subtotal	$ 7,745,872	$ 3,481,071	$ 611,510	$ 419,810	$ 1,024,722	$ 5,537,113	$ 2,208,759	25,545
10 Class D Water Utilities 2/	295,325	229,173	38,678	16,241	836	284,928	10,397	1,870
Total Private Utls.	$ 8,041,197	$ 3,710,244	$ 650,188	$ 436,051	$ 1,025,558	$ 5,822,041	$ 2,219,156	27,415
Municipal Utilities Class A								
Appleton	$ 4,558,185	$ 2,437,213	$ 449,337	$ 623,021	$ 0	$ 3,509,571	$ 1,048,614	21,881
Cudahy	1,400,830	678,857	133,733	228,624	0	1,041,214	359,616	5,252
Eau Claire	3,716,191	1,715,731	379,773	640,830	0	2,736,334	979,857	19,098
Fond du Lac	1,770,628	1,113,983	149,406	234,215	0	1,497,604	273,024	12,835
Glendale	1,161,980	788,278	149,185	137,244	0	1,074,707	87,273	4,528
Green Bay	5,841,079	2,672,319	726,728	746,552	0	4,145,599	1,695,480	33,213
Janesville	1,925,264	1,045,192	207,887	392,988	0	1,646,067	279,197	17,848
Kaukauna	736,531	623,532	69,074	118,777	0	811,383	(74,852)	3,975
Kenosha	5,251,603	2,831,940	481,234	609,902	0	3,923,076	1,328,527	23,823
La Crosse	2,863,406	1,493,147	261,756	475,891	0	2,230,794	632,612	15,450
Madison	8,169,123	4,888,478	988,228	1,449,841	0	7,326,547	842,576	49,585
Manitowoc	2,538,804	1,276,321	222,809	334,616	0	1,833,746	705,058	11,538
Marinette	1,081,303	733,519	98,308	164,084	0	995,911	85,392	4,740
Marshfield	899,030	568,114	68,062	125,438	0	761,614	137,416	6,575
Milwaukee	41,097,609	24,958,829	3,551,868	5,714,891	0	34,225,588	6 872,021	162,393
Neenah	1,505,346	1,007,765	164,188	222,565	0	1,394,518	110,828	8,695
Oshkosh	3,111,701	1,514,680	261,298	437,449	0	2,213,427	898,274	18,294
Racine	5,999,001	3,544,444	451,125	731,267	0	4,726,836	1,272,165	28,589
Sheboygan	2,493,012	1,495,310	149,585	356,671	0	2,001,566	491,446	17,250
South Milwaukee	1,041,715	746,003	75,541	146,963	0	968,507	73,208	5,928
Waukesha	3,877,103	2,300,676	399,125	609,635	0	3,309,436	567,667	13,976
Wausau	2,531,356	1,307,208	217,223	394,556	0	1,918,987	612,369	13,425
Wauwatosa	3,573,643	2,632,355	199,219	426,024	0	3,257,598	316,045	15,659
West Allis	3,963,873	2,673,098	273,479	554,463	0	3,501,040	462,833	18,913
Wisconsin Rapids	1,574,026	1,018,655	127,066	317,529	0	1,463,250	110,776	7,029
Subtotal	$ 112,682,342	$ 66,065,647	$ 10,255,237	$ 16,194,036	$ 0	$ 92,514,920	$ 20,167,422	540,492

TABLE 21 (Concluded)

CONDENSED SUMMARY OF 1988 OPERATIONS
INDIVIDUAL WATER UTILITIES

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Total Operating Expenses	Net Operating Revenues	Average Number of Customers 1/
Municipal Utilities (Continued) Class B								
Allouez	$ 833,491	$ 677,020	$ 75,104	$ 88,296	$ 0	$ 840,420	$ (6,929)	4,908
Ashland	593,033	526,606	41,686	102,447	0	670,739	(77,706)	3,068
Beaver Dam	745,871	517,265	62,742	117,812	0	697,819	48,052	5,417
Brown Deer	837,868	557,816	78,671	123,951	0	760,438	77,430	3,441
Cedarburg	522,646	272,431	79,013	101,308	0	452,752	69,894	2,938
Chippewa Falls	1,101,863	626,642	106,480	187,803	0	920,925	180,938	4,450
De Pere	812,136	404,406	93,417	181,143	0	678,966	133,170	5,504
Greendale	896,494	668,800	61,204	127,457	0	857,461	39,033	4,629
Jefferson	437,800	215,307	41,378	56,982	0	313,667	124,133	1,971
Menasha, Twn. S.D. 4	1,147,975	651,073	192,999	17,867	0	861,939	286,036	4,594
Menasha, City	2,091,584	1,361,458	131,797	258,115	0	1,751,370	340,214	4,967
Menomonee Falls	1,884,567	660,774	206,799	449,035	0	1,316,608	567,959	6,085
New Berlin	2,388,534	746,799	299,619	564,361	0	1,610,779	777,755	6,848
New London	594,957	201,595	39,988	75,966	0	317,549	277,408	2,406
Oak Creek	2,621,431	943,506	385,559	659,054	0	1,988,119	633,312	4,227
Oconomowoc	780,857	381,821	80,810	111,043	0	573,674	207,183	3,444
Platteville	581,271	350,384	74,634	121,782	0	546,800	34,471	2,771
Plymouth	622,531	449,182	38,893	71,387	0	559,462	63,069	2,357
Port Washington	1,350,307	556,521	132,790	209,519	0	898,830	451,477	3,070
Rib Mountain	506,417	174,995	136,102	5,162	0	316,259	190,158	1,420
Rice Lake	561,711	352,887	39,759	73,199	0	465,845	95,866	3,154
River Falls	365,648	223,857	34,985	64,775	0	323,617	42,031	2,573
Shawano	530,099	148,698	51,245	68,436	0	268,379	261,720	3,047
Sheboygan Falls	804,859	479,323	60,652	64,316	0	604,291	200,568	2,159
Shorewood	593,565	542,005	23,116	33,220	0	598,341	(4,776)	3,554
Stevens Point	1,100,241	539,039	84,223	192,488	0	815,750	284,491	6,730
Sturgeon Bay	955,439	365,843	126,007	198,862	0	690,712	264,727	3,695
Sun Prairie	566,857	301,748	56,837	101,469	0	460,054	106,803	4,486
Tomahawk	329,197	153,382	37,443	79,843	0	270,668	58,529	1,282
Two Rivers	844,456	463,280	60,901	118,890	0	643,071	201,385	4,797
Waterloo	129,588	118,399	11,111	20,013	0	149,523	(19,935)	861
Watertown	988,660	499,611	113,142	155,466	0	768,219	220,441	6,055
Waupaca	549,977	297,648	47,162	81,612	0	426,422	123,555	1,841
Waupun	597,916	454,440	36,502	69,429	0	560,371	37,545	2,903
West Bend	1,314,832	659,060	151,904	217,734	0	1,028,698	286,134	7,026
Whitefish Bay	693,991	378,265	65,138	51,189	0	494,592	199,399	4,795
Subtotal	$ 32,278,669	$ 16,921,886	$ 3,359,812	$ 5,221,431	$ 0	$ 25,503,129	$ 6,775,540	137,473
Class C Uilities	41,485,548	20,600,092	5,146,448	6,827,257	0	32,573,797	8,911,751	195,155
Class D Utilities	23,484,994	12,116,770	3,623,964	4,200,504	0	19,941,238	3,543,756	121,421
Total Municipal Utls.	$209,931,553	$115,704,395	$ 22,385,461	$ 32,443,228	$ 0	$170,533,084	$ 39,398,469	994,541
Total All Utilities	$217,972,750	$119,414,639	$ 23,035,649	$ 32,879,279	$ 1,025,558	$176,355,125	$ 41,617,625	1,021,956

1/ Includes fire protection, public authorities, interpartmental and other water utility retail customers.

2/ There were no private Class C utilities in 1988.

3/ () Denotes a negative figure.

STEAM AND HOT WATER HEATING UTILITY SUMMARY

As shown in Table 22, steam and hot water heating utility operations in Wisconsin are not very extensive. Only two utilities rendered this service in 1988.

The Wisconsin Electric Power Company, operating in the city of Milwaukee, has by far the largest heating utility in the State, serving 500 customers at the close of 1988. Its net operating revenue for the year was $1,471,626.

The other community in which heating service was supplied during the year was Waterloo, served by a municipal utility. Waterloo had a net operating revenue for the year 1988 of $9,994.

TABLE 22

COMPARATIVE STATEMENT OF REVENUES, EXPENSES AND STATISTICS FOR WISCONSIN STEAM AND HOT WATER HEATING UTILITIES
1988-1986

	1988	1987	1986
Operating Revenues	$ 12,432,522	$ 10,565,921	$ 11,966,847
Operation and Maintenance	9,105,883	8,022,988	8,789,252
Depreciation	1,062,026	1,140,693	897,035
Taxes	782,993	585,162	1,020,573
Total Operating Expenses	$ 10,950,902	$ 9,748,843	$ 10,706,8700
Net Operating Revenues	$ 1,481,620	$ 817,078	$ 1,259,9727
Number of Customers	552	571	5787